

F **FEDUS ENGINEERING, LLC**
CIVIL ENGINEERS

70 Essex Street, Unit 2C, Mystic, CT 06355 ■ Phone: 860-536-7390

January 4, 2022

Carey R. Duques
Land Use Official/Zoning Enforcement Officer
Town of Essex
26 West Avenue
Essex, CT 06426

RECEIVED
JAN 05 2022

BY: *CD*

Re: Wetlands Application
3 Foster Lane
Essex, CT 06426

Dear Ms. Duques:

In response to the Town Engineer's January 3, 2022 comments regarding the subject property, we have developed the following point by point response:

1. Silt fence on south side of site should be backed by hay bales. – **Added.**
2. The hay bales should be on the downhill side of the silt fence. - **Addressed.**
3. Will rain gardens #1 & #5 be overwhelmed by a rainfall event due to the contributing watershed/slope above? – **Rain gardens are designed to handle the watershed. Rain garden #5 will overflow into rain garden #1 to handle the watershed. Calculations have been updated on Sheet 6 of 6.**
4. Need soil tests in the area of the proposed pool and up gradient. Will need this information for Zoning also to determine if we are dealing with a rock face or an earthen slope. – **Test pit will be conducted in the next few days. If rock face isn't discovered during construction an engineered retaining wall will be use.**
5. Please review your rain garden calculations. You may have 30% voids for a broken stone but I don't think you would for permeable soil, mulch or a topsoil/sand mix. – **Your concerns are noted. However, after research on topic we have determined that the void ratio that is used for the rain gardens calculations is conservative at 30% for all soil types.**

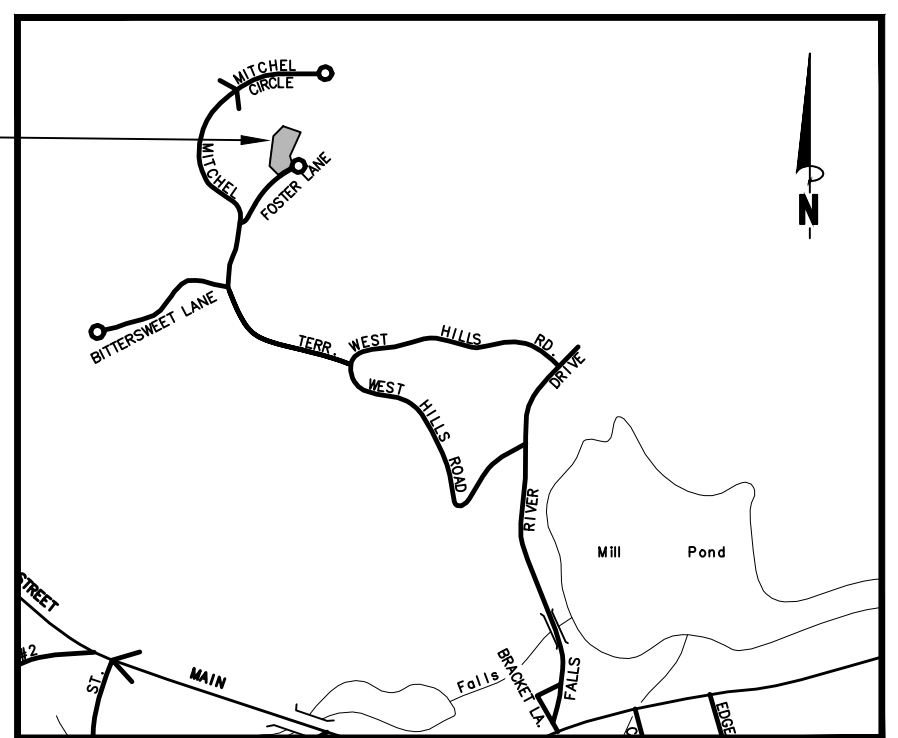
If you have any questions or require anything further please contact our office at 802-440-6130.

Sincerely,

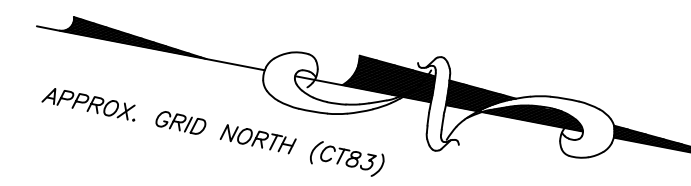

Nathaniel Fleming

RUM - ZONING REQUIREMENTS TABLE

SECTION	REGULATION	REQUIREMENTS	EXISTING	PROPOSED
61.B	MINIMUM LOT AREA	80,000 SF	99,389 SF	99,389 SF
61.B	MINIMUM LOT WIDTH	150'	198.53'	198.53'
61.B	MINIMUM FRONT YARD	40'	-	172.8'
61.B	MINIMUM SIDE YARD	30'	-	151.4' (N), 140.9' (S)
61.B	MINIMUM REAR YARD	30'	-	31.1'
61.B	MAXIMUM BUILDING COVERAGE	15%	-	5.0%
61.B	MAXIMUM BUILDING HEIGHT	35'	-	< 35'



Location Map
Scale: 1"=1000'



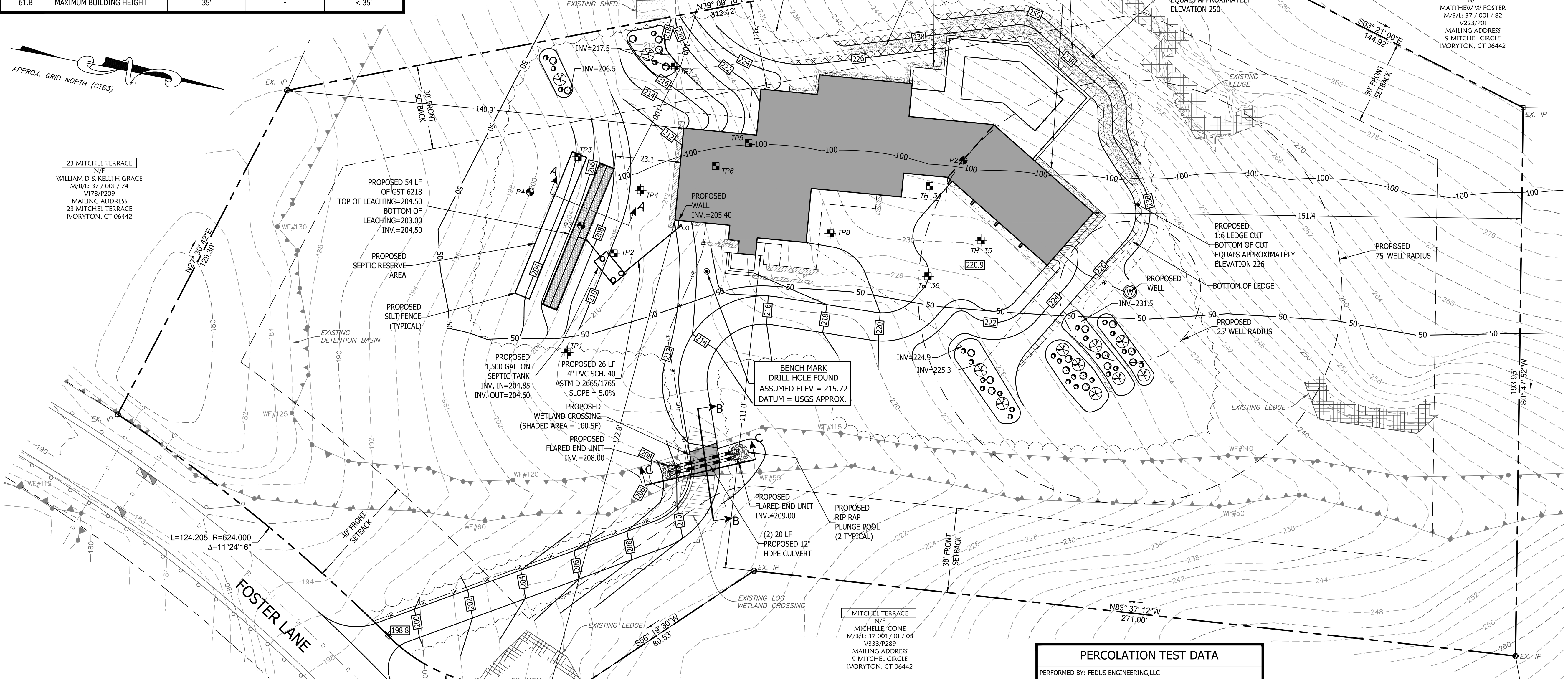
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Legend

EXISTING	
SYMBOL	DESCRIPTION
□	MONUMENT
○	EX. IP / REBAR
●	DRILL HOLE
○	UTILITY POLE W/ LIGHT
—	STONEWALL
—	FENCE LINE
—	WATER VALVE
—	OVERHEAD WIRES
—	PROPERTY LINE
—	ADJACENT PROPERTY LINE
—	INDEX CONTOUR
—	CONTOUR
—	WETLANDS BOUNDARY/FLAG
—	MEAN LOW WATER LINE
—	MEAN HIGH WATER LINE
—	HIGH TIDE LINE
—	COASTAL JURISDICTIONAL LINE
—	ZONE LINE
—	EASEMENT LINE
—	BUILDING SETBACK LINE
—	EXISTING WATER LINE
—	EXISTING SEWER LINE
N/F	NOW OR FORMERLY
—	CATCH BASIN
(TYP.)	TYPICAL
5.8	SPOT ELEVATION
○	DRILL HOLE
(POB)	POINT OF BEGINNING
+	TEST PIT
P1	PERCOLATION TEST
○	UTILITY POLE
○	DRAINAGE MANHOLE
○	SEWER MANHOLE
○	HYDRANT
○	WATER SHUTOFF
○	PROPOSED
○	IRON PIN TO BE SET

**2 FOSTER LANE - SEPTIC DESIGN DATA
6 BEDROOM DESIGN**

PERC RATE = <10.1 MINS/INCH = 742.5 SF OF EFFECTIVE LEACHING REQUIRED
GST6236 = 26.2 SF/LF
MINIMUM REQUIRED TRENCH = 742.5 SF / 26.2 SF/LF = 28.34 LF
TRENCH PROVIDED = 30 LF
EFFECTIVE LEACHING PROVIDED = 786 SF

MLSS CALCULATION:
DEPTH TO RESTRICTIVE LAYER > 60"
MLSS NOT REQUIRED

DEEP TEST PIT DATA / SOIL DESCRIPTIONS

PERFORMED BY: FEDUS ENGINEERING, LLC - GREGG FEDUS, P.E.
WITNESSED BY: DON MITCHELL, MPH, RS DATE: 6/8/2021

TEST PIT: 1	TEST PIT: 2	TEST PIT: 3	TEST PIT: 4	TEST PIT: 5	TEST PIT: 6
0 - 22" LEDGE AT 22"	0"-3" ORGANIC LAYER, LEAF LITTER 3"-40" LIGHT BROWN TO VARIES TO RED BROWN SILT LOAM (DAMP) 40"-87" GREY MEDIUM TO COARSE SAND, WITH GRAVEL, SOME ROCKS (LOOSE)	0"-6" TOPSOIL AND LEAF LITTER 6"-39" RED BROWN TO LIGHT BROWN SILT LOAM (DAMP) 39"-82" GREY SANDY TILL, MANY LARGE ROCKS (LOOSE TO FIRM)	18"-36" LEDGE	0"-3" TOPSOIL AND LEAF LITTER 3"-19" ORANGE BROWN VERY FINE SANDY LOAM (LOOSE) 19"-60" GREY SANDY TILL WITH ROCKS	0"-10" TOPSOIL AND LEAF LITTER 10"-23" BROWN SANDY LOAM 23"-70" GREY SANDY TILL
MOTTLES: NO GROUNDWATER: NO LEDGE: 22" ROOTS: NO RESTRICTIVE: 22"	MOTTLES: NO GROUNDWATER: NO LEDGE: NO ROOTS: 43" RESTRICTIVE: 87"	MOTTLES: NO GROUNDWATER: NO LEDGE: NO ROOTS: 52" RESTRICTIVE: 82"	MOTTLES: NO GROUNDWATER: NO LEDGE: 18-36" ROOTS: NO RESTRICTIVE: 18"	MOTTLES: NO GROUNDWATER: NO LEDGE: 18"-60" ROOTS: 36" RESTRICTIVE: 60"	MOTTLES: NO GROUNDWATER: NO LEDGE: 70" ROOTS: 52" RESTRICTIVE: 70"

PERCOLATION TEST DATA
PERFORMED BY: FEDUS ENGINEERING, LLC
DATE: 9/14/21 LOT 2 FOSTER LANE - P3

DEPTH: 19"	DIA. OF HOLE: 8"		
ELAPSED TIME (MIN)	READING (INCHES)	CHANGE (INCHES)	PERC. RATE (MIN/INCH)
0	7		
10	10	3	3.33
20	12	2	5.00
30	13	1	10.00
40	14 1/2	1 1/2	8.00
50	15 1/2	1 1/2	8.00
60	16 3/4	1 1/4	8.00

PERCOLATION TEST DATA
PERFORMED BY: FEDUS ENGINEERING, LLC
DATE: 9/14/21 LOT 2 FOSTER LANE - P4

DEPTH: 20"	DIA. OF HOLE: 8"		
ELAPSED TIME (MIN)	READING (INCHES)	CHANGE (INCHES)	PERC. RATE (MIN/INCH)
0	8		
10	10	2	5.00
20	11 1/2	1 1/2	6.67
30	12 3/4	1 1/4	8.00
40	13 3/4	1	10.00
50	14 3/4	1	10.00
60	15 3/4	1	10.00

DEEP TEST PIT DATA / SOIL DESCRIPTIONS
PERFORMED BY: FEDUS ENGINEERING, LLC - GREGG FEDUS, P.E.
WITNESSED BY: DON MITCHELL, MPH, RS DATE: 6/10/2021

TEST PIT: 7	TEST PIT: 8
0 - 2" TOPSOIL AND LEAF LITTER 2"-28" ORANGE BROWN VERY FINE SANDY LOAM 28"-64" GREY SANDY, GRAVELLY TILL WITH ROCKS	0"-6" TOPSOIL AND LEAF LITTER 6"-24" RED BROWN VERY FINE SANDY LOAM 24"-68" GREY SANDY, GRAVELLY TILL WITH ROCKS (LARGE BOULDER IN HOLE)
MOTTLES: NO GROUNDWATER: NO LEDGE: 64" ROOTS: 34" RESTRICTIVE: 64"	MOTTLES: NO GROUNDWATER: NO LEDGE: NO ROOTS: 38" RESTRICTIVE: 68"

Subject Parcel Information

OWNER: BEVON SEMPLE
PARCEL ADDRESS: MITCHEL TERRACE (2 FOSTER LANE)
MAILING ADDRESS: 88-20 PARSONS BLVD STE 5B, JAMAICA, NY 11432
MBL: 37/001/02
DEED: VOLUME 343 PAGE 370
AREA: 99,389 SF = 2.28 AC
FLOOD ZONE: ZONE X PER FIRM MAP # 09007C0327G
EFFECTIVE DATE: 08/28/2008

NO.	DATE	REVISIONS
1	10/27/2021	WETLAND COMMENTS
2	11/30/2021	WETLAND COMMENTS
3	1/4/2022	WETLAND COMMENTS

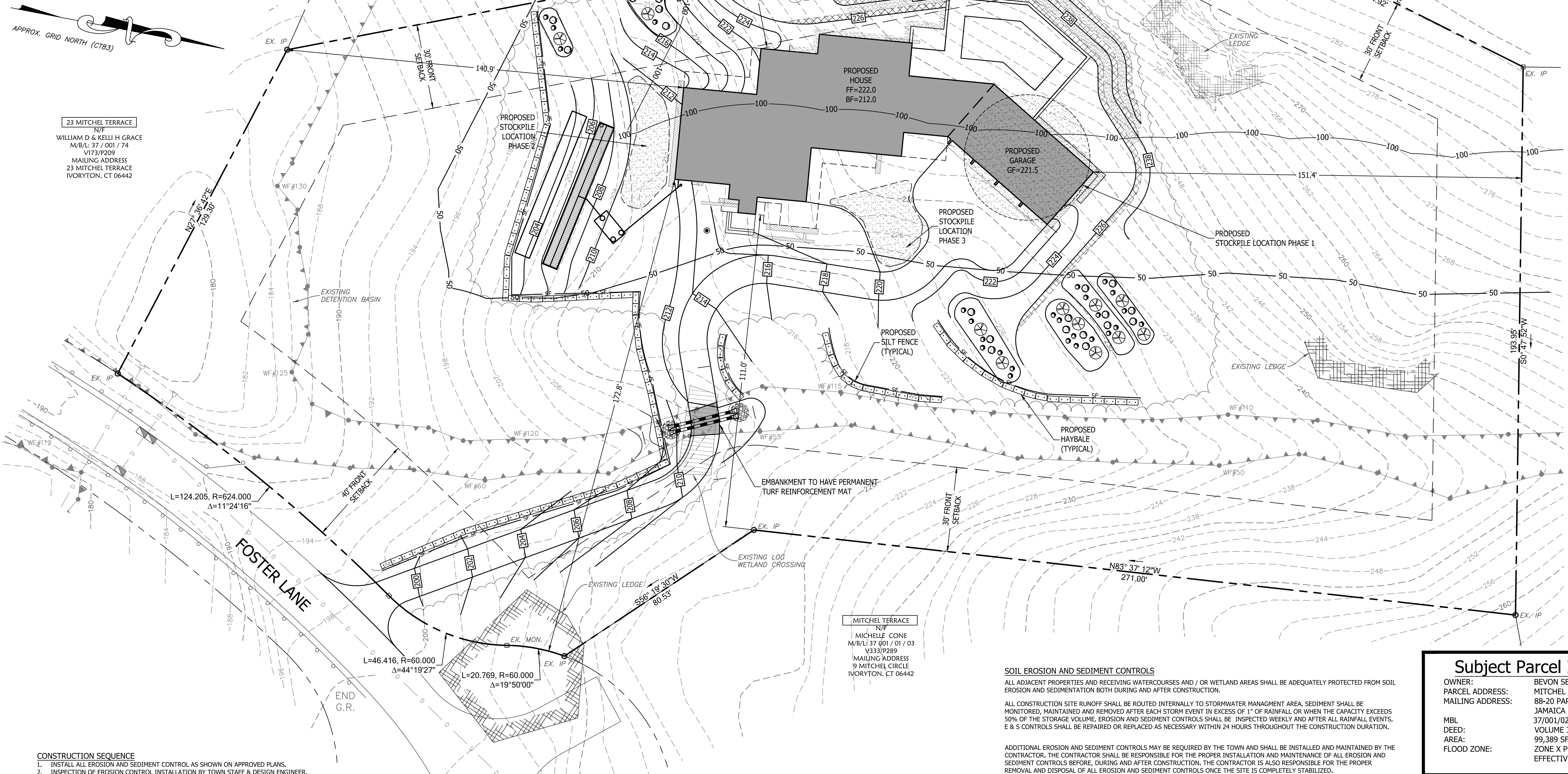
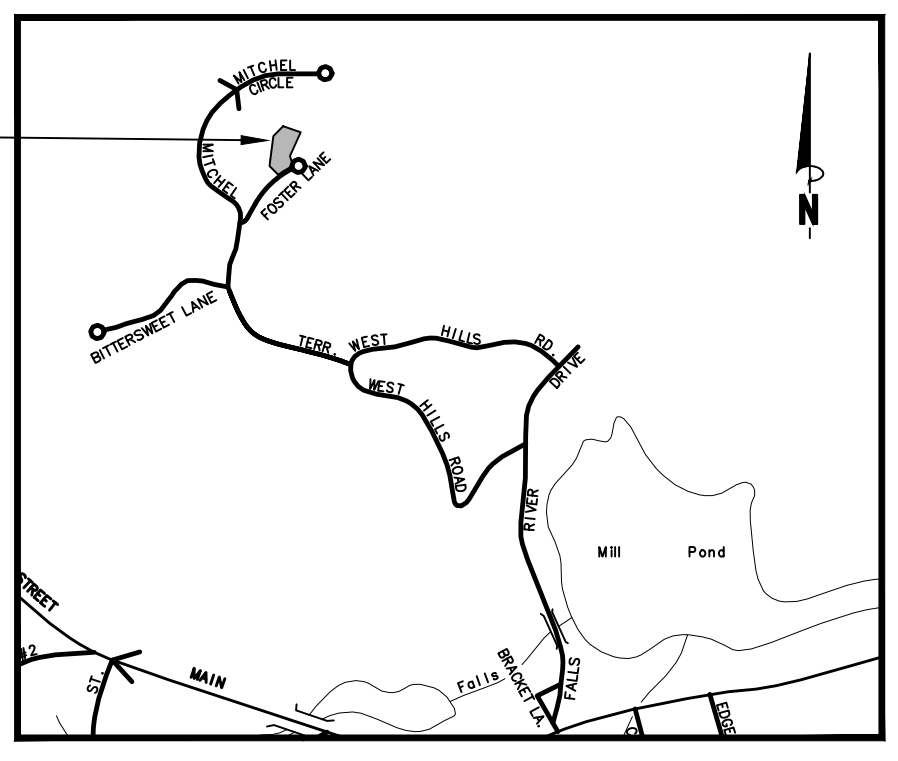
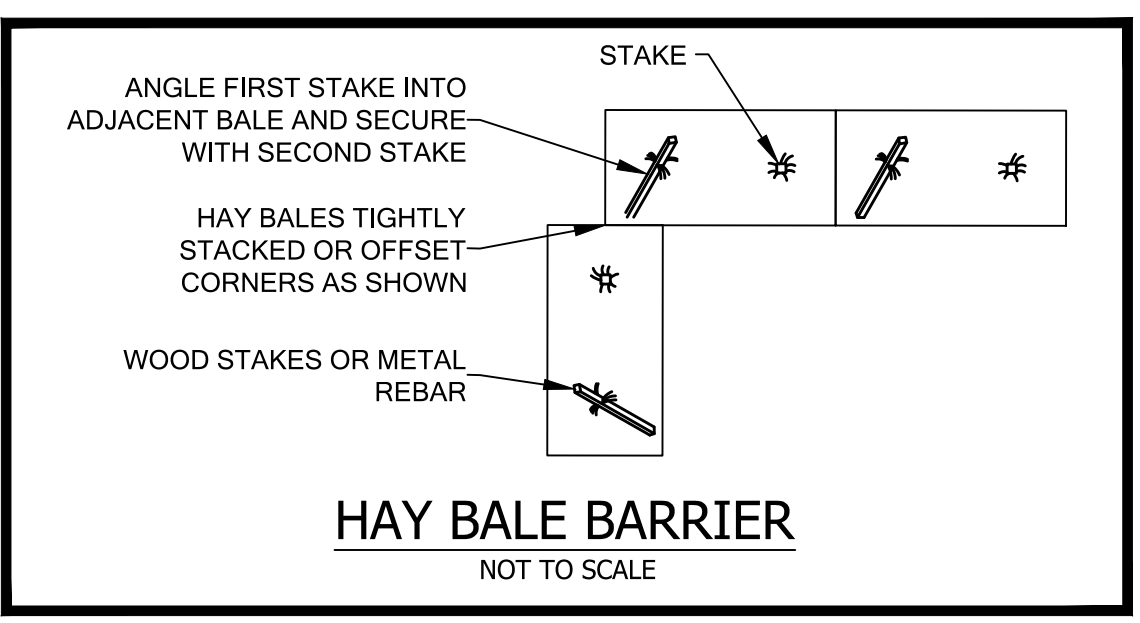
Site Plan
of
3 Foster Lane
Ivoryton, Connecticut
Prepared For:
Bevon Semple
August 5, 2021

DRAWING SCALE: 1"=20'
0 10 20 40

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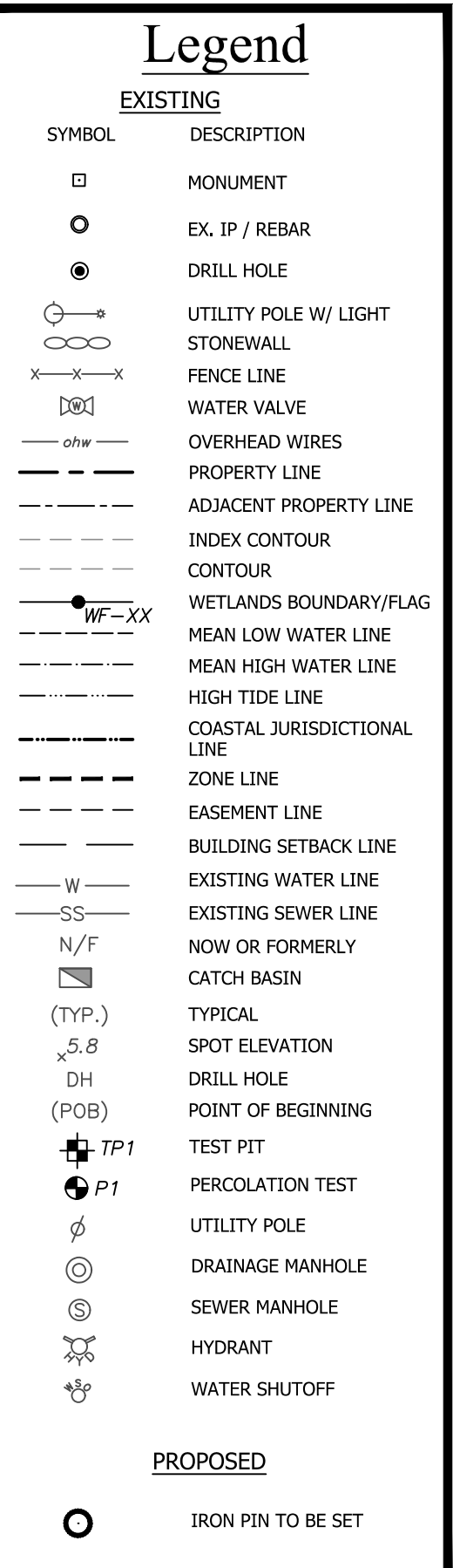
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FLOOD ZONE:	ZONE X PER FIRM MAP # 09007C0327G
	EFFECTIVE DATE: 08/28/2008

SOIL EROSION AND SEDIMENT CONTROLS
ALL ADJACENT PROPERTIES AND RECEIVING WATERCOURSES AND / OR WETLAND AREAS SHALL BE ADEQUATELY PROTECTED FROM SOIL EROSION AND SEDIMENTATION BOTH DURING AND AFTER CONSTRUCTION.
ALL CONSTRUCTION SITE RUNOFF SHALL BE ROUTED INTERNALLY TO STORMWATER MANAGEMENT AREA. SEDIMENT SHALL BE MONITORED, MAINTAINED AND REMOVED AFTER EACH STORM EVENT IN EXCESS OF 1" OF RAINFALL OR WHEN THE CAPACITY EXCEEDS 50% OF THE STORAGE VOLUME. EROSION AND SEDIMENT CONTROLS SHALL BE INSPECTED WEEKLY AND AFTER ALL RAINFALL EVENTS. E & S CONTROLS SHALL BE REPAIRED OR REPLACED AS NECESSARY WITHIN 24 HOURS THROUGHOUT THE CONSTRUCTION DURATION.
ADDITIONAL EROSION AND SEDIMENT CONTROLS MAY BE REQUIRED BY THE TOWN AND SHALL BE INSTALLED AND MAINTAINED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROLS BEFORE, DURING AND AFTER CONSTRUCTION. THE CONTRACTOR IS ALSO RESPONSIBLE FOR THE PROPER REMOVAL AND DISPOSAL OF ALL EROSION AND SEDIMENT CONTROLS ONCE THE SITE IS COMPLETELY STABILIZED. ALL EROSION AND SEDIMENT CONTROLS SHALL BE INSPECTED WEEKLY AND AFTER ALL RAINFALL EVENTS. E & S CONTROLS SHALL BE REPAIRED OR REPLACED AS NECESSARY WITHIN 24 HOURS THROUGHOUT THE CONSTRUCTION DURATION.
ALL ACCUMULATED SEDIMENTS AT ALL EROSION AND SEDIMENT CONTROLS SHALL BE PERIODICALLY REMOVED AND SPREAD IN AREAS THAT ARE NOT SUBJECT TO EROSION.
THE PERMITTEE SHALL EMPLOY BEST MANAGEMENT PRACTICES, CONSISTENT WITH THE TERMS AND CONDITIONS OF THE INLAND WETLANDS PERMIT, TO CONTROL STORMWATER DISCHARGES AND TO PREVENT EROSION AND SEDIMENTATION AND TO OTHERWISE PREVENT POLLUTION OF WETLANDS OR WATERCOURSES. THE PERMITTEE SHALL IMMEDIATELY INFORM THE TOWN WETLANDS OFFICER OF ANY PROBLEMS INVOLVING WETLANDS OR WATERCOURSES THAT HAVE DEVELOPED IN THE COURSE OF, OR THAT ARE CAUSED BY, THE AUTHORIZED WORK.
THE RESPONSIBLE CONTACT PERSON FOR THE INSTALLATION AND MAINTENANCE OR EROSION AND SEDIMENTATION CONTROLS ON THIS PROJECT WILL BE THE SITE CONTRACTOR. THE CONTACT INFORMATION FOR THE CONTRACTOR WILL BE MADE AVAILABLE TO THE TOWN AS SOON AS IT IS AVAILABLE.

VEGETATIVE TURF ESTABLISHMENT PROCEDURE
SCARIFY ALL AREAS TO BE TOPSOILED AND SEEDED. APPLY A MINIMUM OF 4 INCHES OF TOPSOIL ON ALL AREAS TO BE SEEDED. APPLY GRASS SEED, LIME, FERTILIZER AND MULCH ACCORDING TO THE FOLLOWING SCHEDULE:
PERMANENT SEED MIXTURE:
CREEPING RED FESCUE 2.4 LBS. PER 1,000 SQ. FT.
REDTOP 0.2
TALL FESCUE 2.4
TOTAL 5.0
FERTILIZER:
10-10-10 APPLY AT 7.5 LBS. PER 1,000 SQ. FT.
LIMESTONE:
APPLY AT 150 LBS. PER 1,000 SQ. FT.
MULCHING:
SPREAD HAY OR STRAW OVER ALL AREAS AFTER SEEDING. USE 1 1/2 TO 2 BALES PER 1,000 SQ. FT.
TARGET FOR 100% COVERAGE. ANCHOR BY USING NETTING OR TRACKING AS NECESSARY.

SEEDING DATES:
SEEDING DATES IN CONNECTICUT ARE NORMALLY APRIL 1 THROUGH JUNE 15 AND AUGUST 15 THROUGH OCTOBER 1.
SEED GERMINATION NORMALLY CANNOT BE EXPECTED FROM NOVEMBER THROUGH FEBRUARY. IF ADEQUATE SEED GERMINATION IS NOT POSSIBLE DUE TO TIME OF YEAR CONSTRAINTS, MULCHING SHALL BE ADEQUATELY PROVIDED TO PROTECT THE SEED FROM WIND AND SURFACE EROSION UNTIL THE WEATHER IMPROVES AND THE SEEDING BECOMES WELL ESTABLISHED.

SOIL EROSION AND SEDIMENT CONTROL PLAN NARRATIVE
THE SITE CONTRACTOR MUST FOLLOW ALL GUIDELINES SET FORTH IN THE MANUAL ENTITLED "2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL" PUBLISHED BY THE CONNECTICUT COUNCIL ON SOIL AND WATER CONSERVATION IN COOPERATION WITH THE CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION. THIS MANUAL IS ALSO KNOWN AS DEP BULLETIN 34. IN ADDITION THE SITE CONTRACTOR MUST FOLLOW THE TOWN'S ZONING AND SUBDIVISION REGULATIONS, TOWN EMERGENCY STANDARDS AND SPECIFICATIONS, CTDOT FORM 816 WHERE APPLICABLE.

LAND DISTURBANCE
1. ALL EXISTING VEGETATION OUTSIDE OF THE CLEARING LIMITS SHALL BE PROTECTED. EXISTING VEGETATION SHALL BE REMOVED ONLY IN AREAS NECESSARY FOR SITE CONSTRUCTION ACTIVITIES. ANY ADDITIONAL CLEARING OUTSIDE OF THE PROPOSED CLEARING LIMITS SHALL BE APPROVED BY TOWN STAFF PRIOR TO CLEARING, AS APPLICABLE.
2. ALL AREAS SHALL REMAIN UNDISTURBED UNTIL IMMEDIATELY PRIOR TO SITE DEVELOPMENT.
3. ALL CONSTRUCTION EQUIPMENT, MATERIALS AND STOCKPILES SHALL NOT BE PLACED OUTSIDE OF THE DISTURBED AREAS.
4. THE DEVELOPER SHALL BE RESPONSIBLE FOR THE CLEANING OF ANY NEARBY STREETS, AS ORDERED BY THE TOWN OR STATE, OF ANY SOIL OR DEBRIS FROM THE SITE CONSTRUCTION ACTIVITIES.
5. ALL TREES, BRUSH, STUMPS, WOOD CHIPS OR OTHER ORGANIC MATTER SHALL BE DISPOSED OF PROPERLY OFF-SITE. WOOD CHIPS MAY BE USED AS A SILTATION BARRIER DURING CONSTRUCTION AND SPREAD AFTER SITE IS STABILIZED. NO ORGANIC MATTER INCLUDING TREES, BRUSH AND STUMPS SHALL BE BURIED ON-SITE.

STRIPPING AND STOCKPILING
ALL STOCKPILES THAT CONSIST OF ERODIBLE MATERIALS SHALL BE LOCATED WITHIN AREAS AS SHOWN ON THE SITE PLAN AND SURROUNDED BY A SILTATION BARRIER. ANY STOCKPILE THAT WILL REMAIN UNDISTURBED FOR A PERIOD LONGER THAN 30 DAYS SHALL BE SEEDED WITH A TEMPORARY GRASS SEED MIXTURE TO PREVENT EXCESSIVE EROSION AND SEDIMENTATION.

TRENCH EXCAVATION AND BACKFILL
THE CONTRACTOR SHALL PROPERLY MAINTAIN ALL BACKFILLED EXCAVATIONS. ANY DEPRESSIONS DUE TO SETTLING IN THESE AREAS SHALL BE FILLED AND RESEEDED AS NECESSARY.

THE WIDTH OF ALL EXCAVATED TRENCHES SHALL BE KEPT AS NARROW AS PRACTICABLE TO ACCOMMODATE THE WORK. ALL MATERIALS EXCAVATED FROM TRENCHES SHALL BE STOCKPILED AND USED AS TRENCH BACKFILL MATERIAL UNLESS IT IS DETERMINED TO BE UNSUITABLE BY THE ENGINEER. EXCESS MATERIALS SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR.

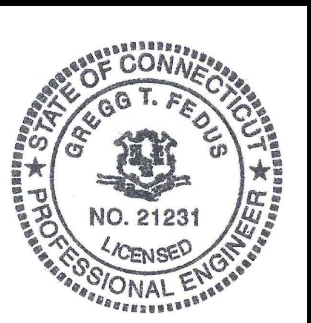
- CONSTRUCTION SEQUENCE**
1. INSTALL ALL EROSION AND SEDIMENT CONTROL AS SHOWN ON APPROVED PLANS.
 2. INSPECTION OF EROSION CONTROL INSTALLATION BY TOWN STAFF & DESIGN ENGINEER.
 3. CLEAR AND GRUB SITE TO LIMITS OF DISTURBANCE.
 4. ROUGH GRADE SITE, BLASTING, AND DRILLING.
 5. CONSTRUCT BUILDING.
 - A. EXCAVATE FOUNDATION OF BUILDING
 - B. FORM AND POUR FOOTINGS AND WALLS
 - C. STRIP FORMS, WATERPROOF FOUNDATIONS AND BACKFILL
 - D. COMPACT LOWER LEVEL FLOOR AND POUR CONCRETE FLOORS
 - E. FRAME BUILDING AND ROOFING
 - F. INSTALL WINDOWS AND DOORS
 - G. INSTALL SIDING
 - H. ROUGH MECHANICALS
 - I. INSULATE
 - J. SHEETROCK
 - K. INTERIOR TRIM AND DOORS
 - L. FLOORING
 - M. FINISH MECHANICALS
 - N. PAINT
 6. INSTALL SEPTIC SYSTEM.
 7. INSTALL WELL.
 8. INSTALL DRAINAGE SYSTEM.
 9. INSTALL UNDERGROUND ELECTRIC.
 10. INSTALL SUBGRADE AND COMPACT IN PAVED AREAS.
 11. PLACE BINDER COURSE.
 12. INSTALL SURFACE COURSE.
 13. LOAM AND SEED DISTURBED AREAS.
 14. LANDSCAPE FINISHED AREAS.
 15. FINAL STABILIZATION OF SITE.
 16. FINAL CLEANING OF STORMWATER SYSTEM AND GENERAL SITE CLEANUP.
 17. OBTAIN FINAL INSPECTIONS.
 18. REMOVE EROSION AND SEDIMENTATION CONTROL DEVICES.

NO.	DATE	REVISIONS
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2	11/30/2021	WETLAND COMMENTS
3	1/4/2022	WETLAND COMMENTS

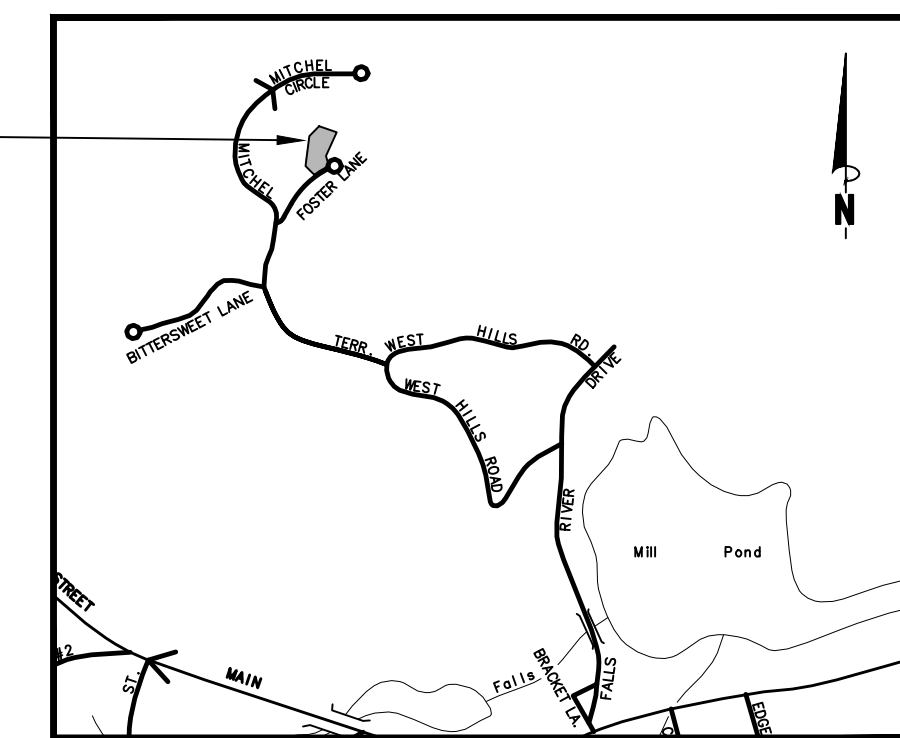
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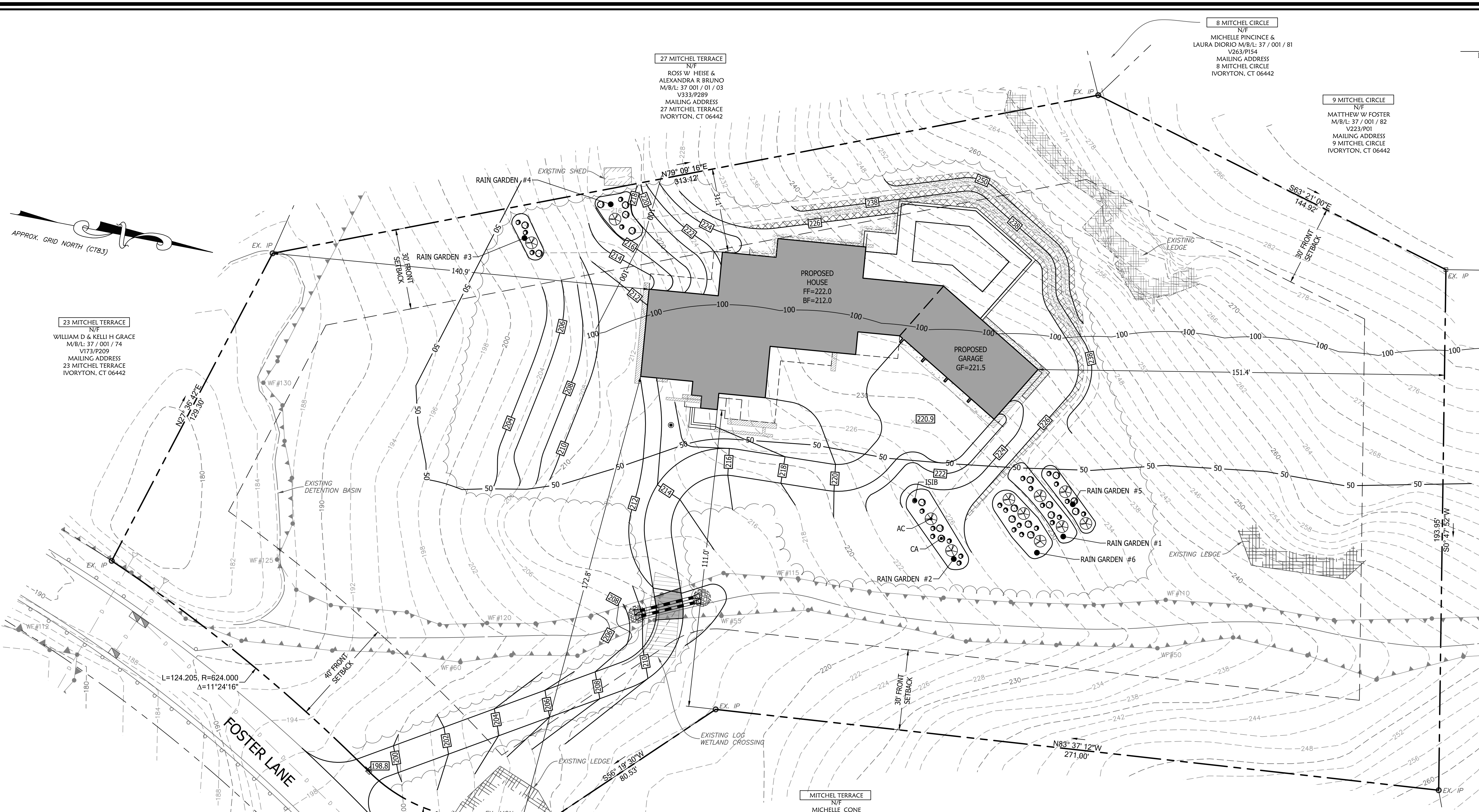
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---	INDEX CONTOUR
---	CONTOUR
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---	HIGH TIDE LINE
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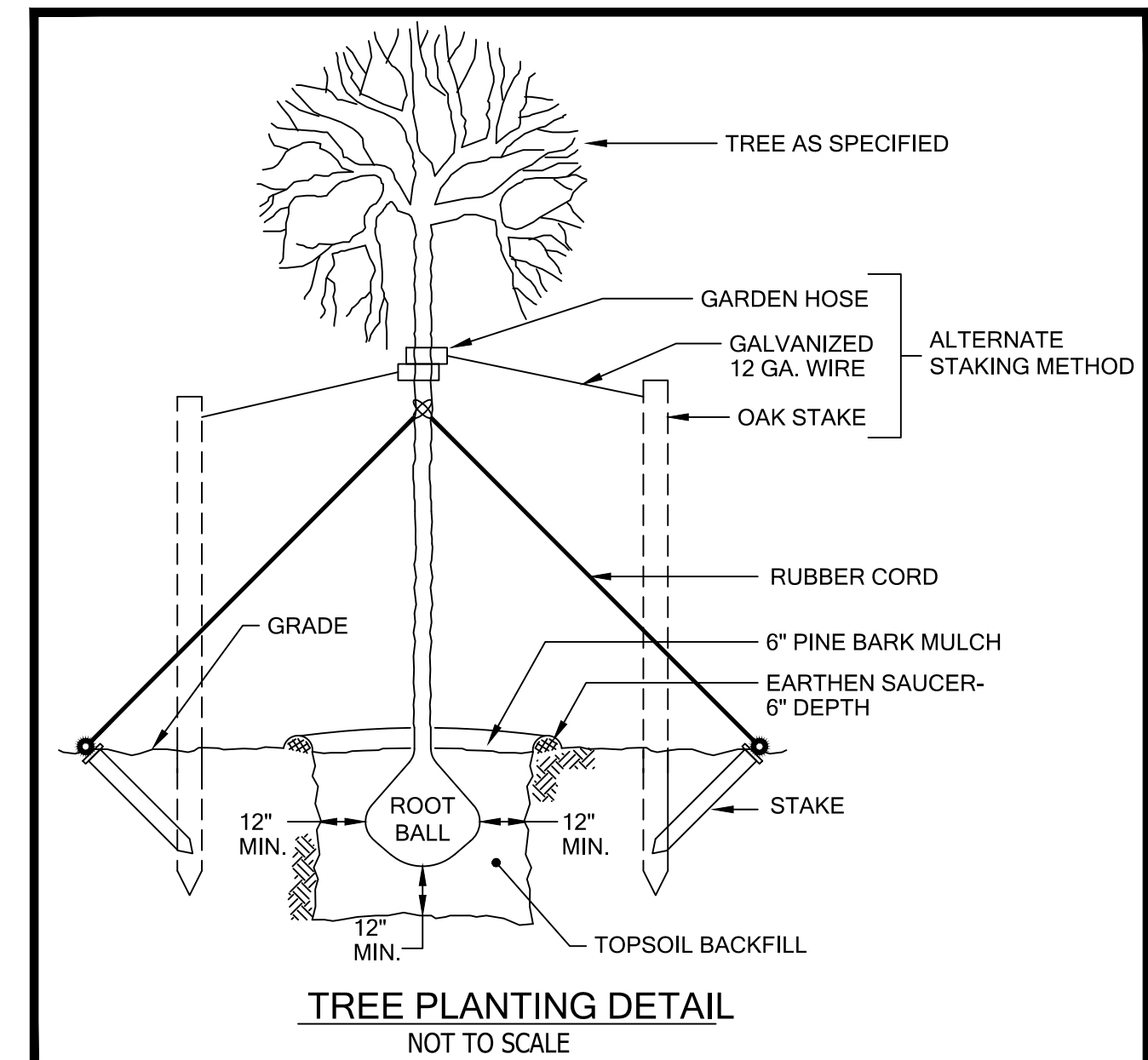
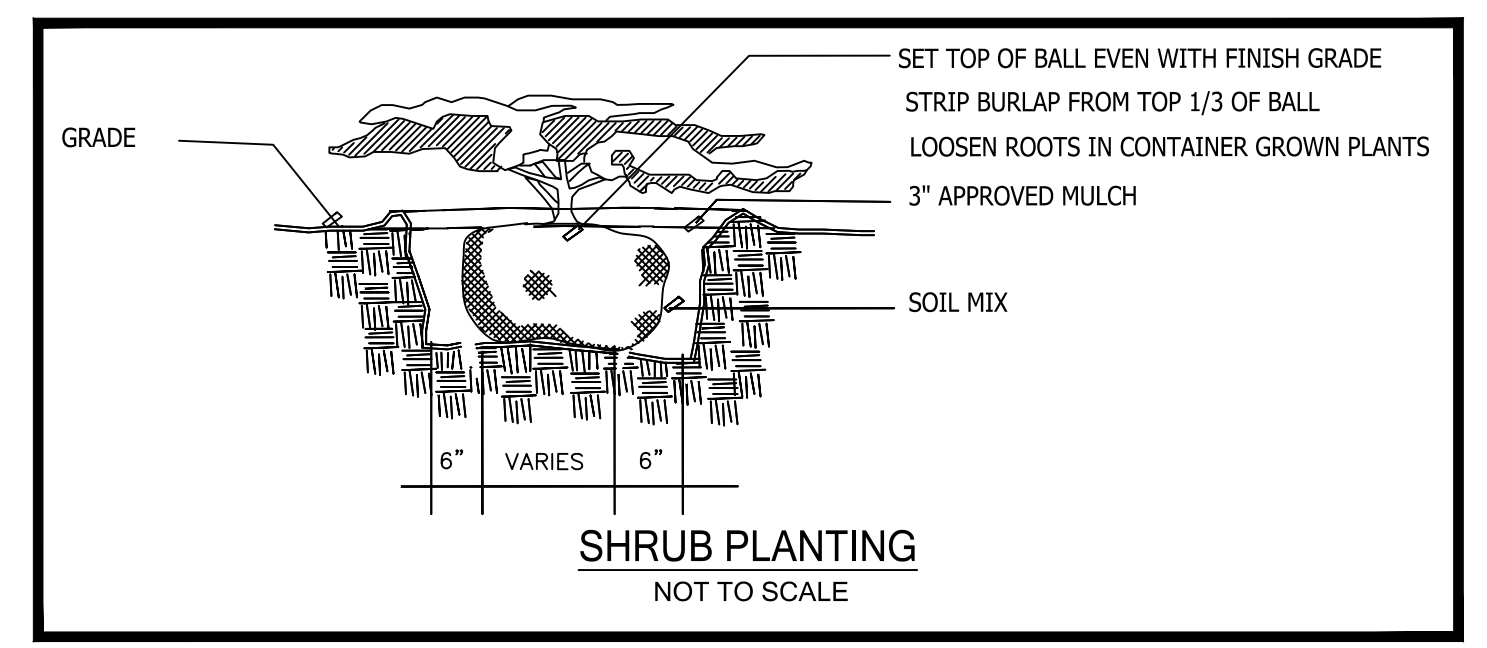
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 DEED: VOLUME 343 PAGE 370
 AREA: 99,389 SF = 2.28 AC
 FLOOD ZONE: ZONE X PER FIRM MAP # 09007C0327G
 EFFECTIVE DATE: 08/28/2008

PLANT LIST

KEY	QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE, ROOTS, REMARKS
AC	11	AMELANCHLER CANADENSIS	SHADBUSH	8'-10' TALL
1CA	17	CLETHRA ALNIFOLIA	SUMMERSWEET	18" - 24"
ISIB	25	IRIS SIBERICA (BLUE)	BLUE SIBERIAN IRIS	CLUMPS

*ALL PLANTINGS SHALL BE NON-INVASIVE SPECIES AND SHALL BE NATIVE PLANTINGS.



REVISIONS

NO.	DATE	REVISIONS
1	10/27/2021	WETLAND COMMENTS
2	11/30/2021	WETLAND COMMENTS
3	1/4/2022	WETLAND COMMENTS

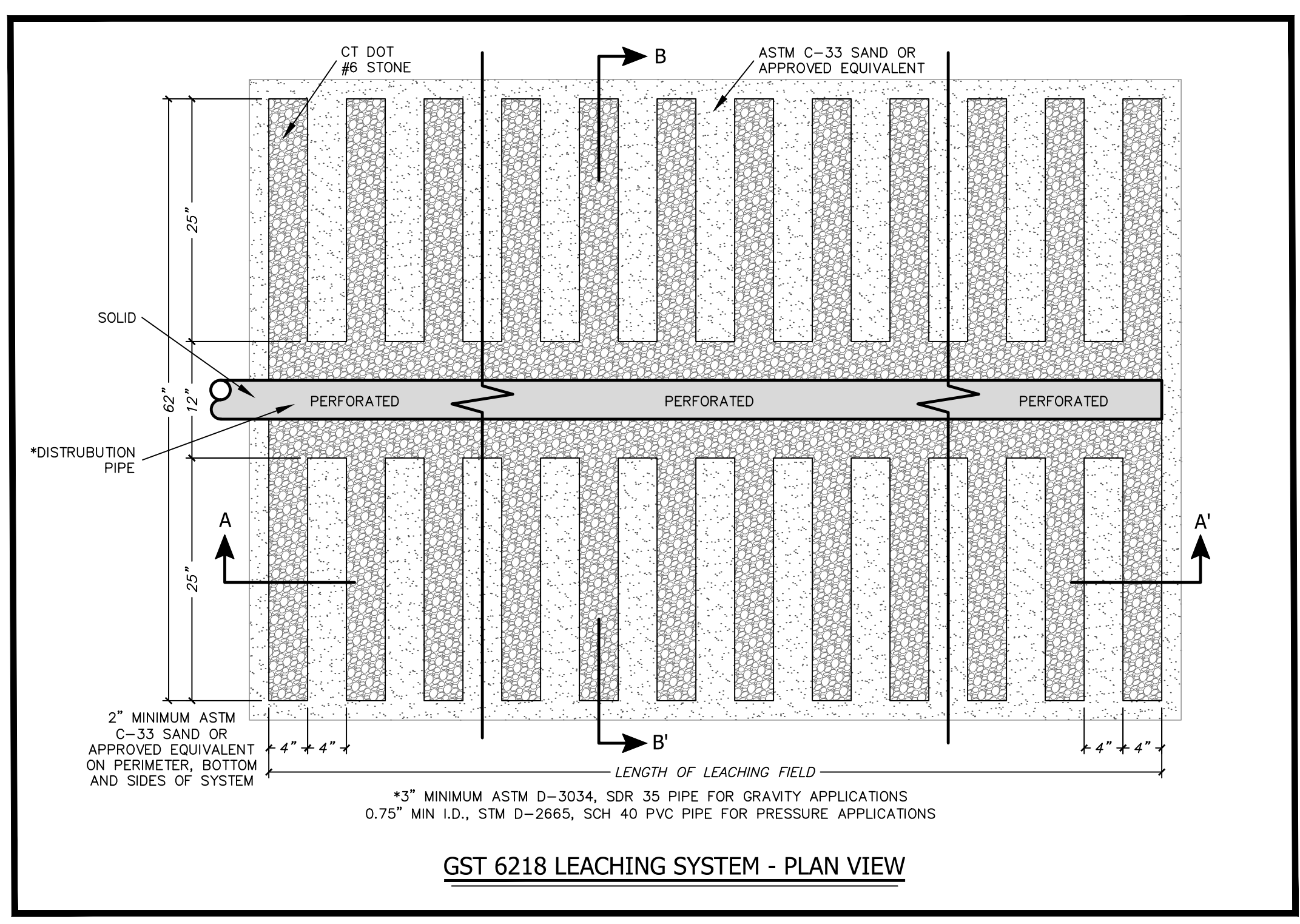
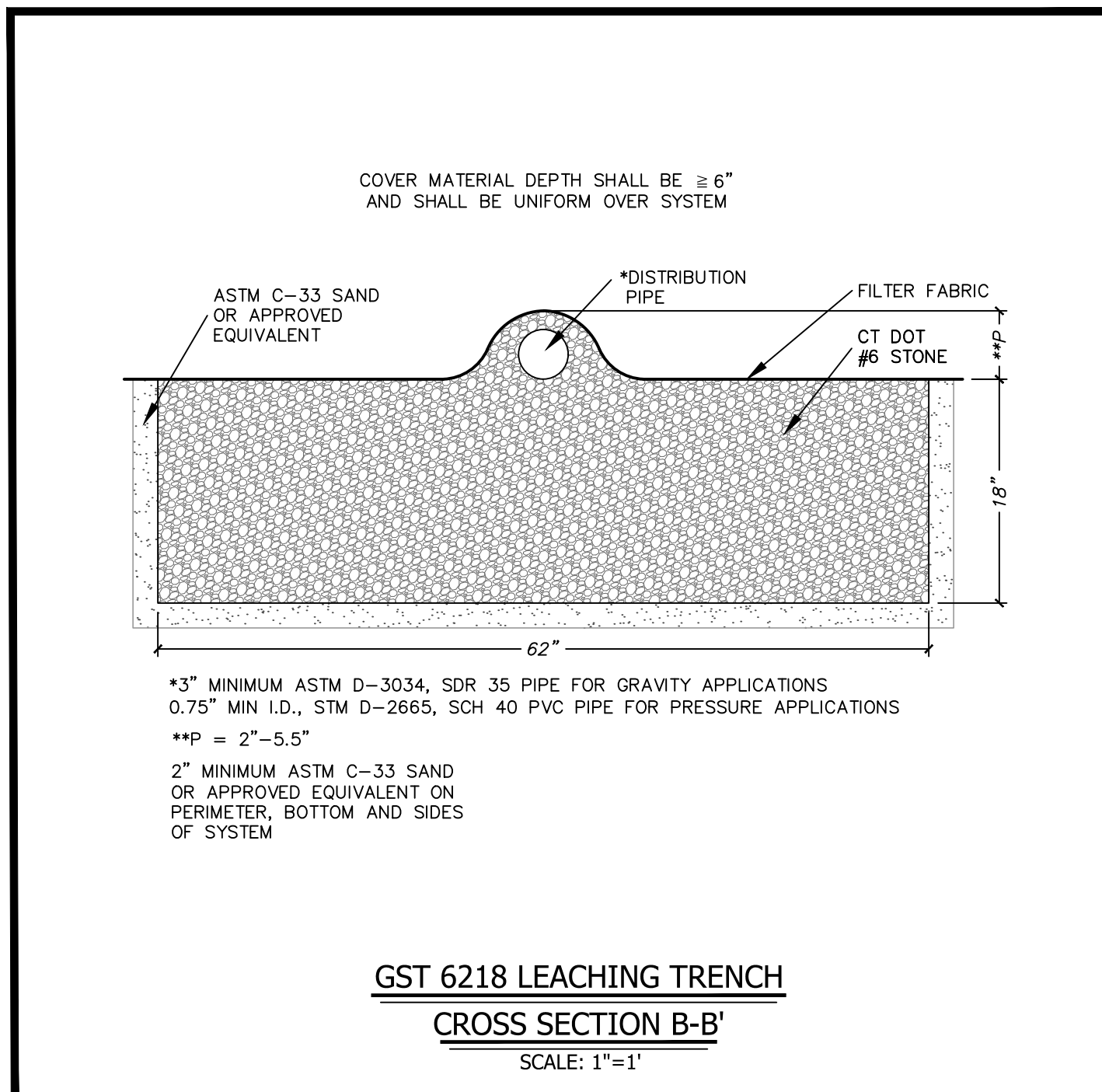
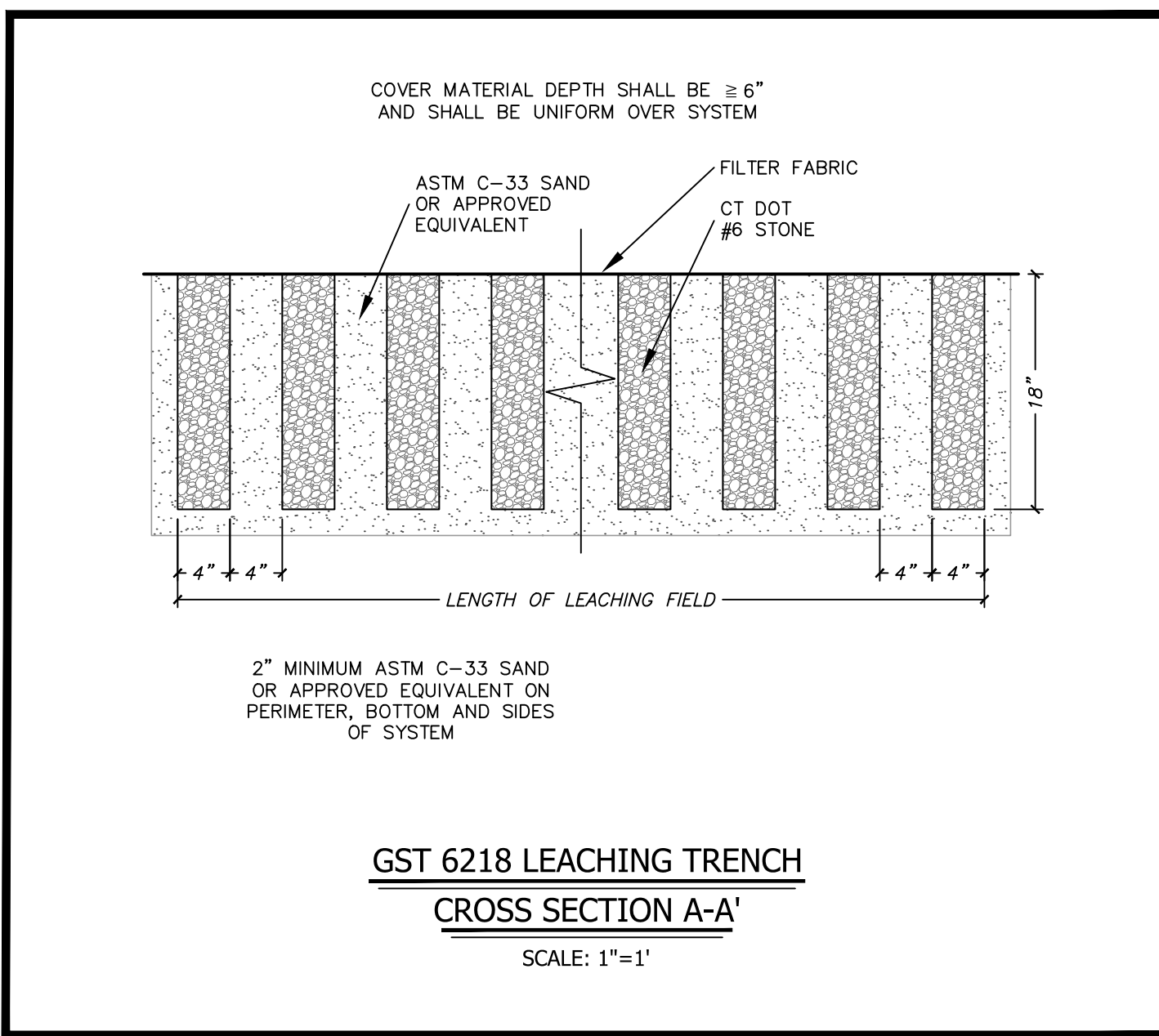
Landscape Plan
of
3 Foster Lane
Ivoryton, Connecticut
Prepared For:
Bevon Semple
August 5, 2021

DRAWING SCALE: 1"=20'

Gregg T. Fedus P.E.
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SHEET NO. 4 OF 6 JOB NO. 21-001010 DRAWN BY: CAC

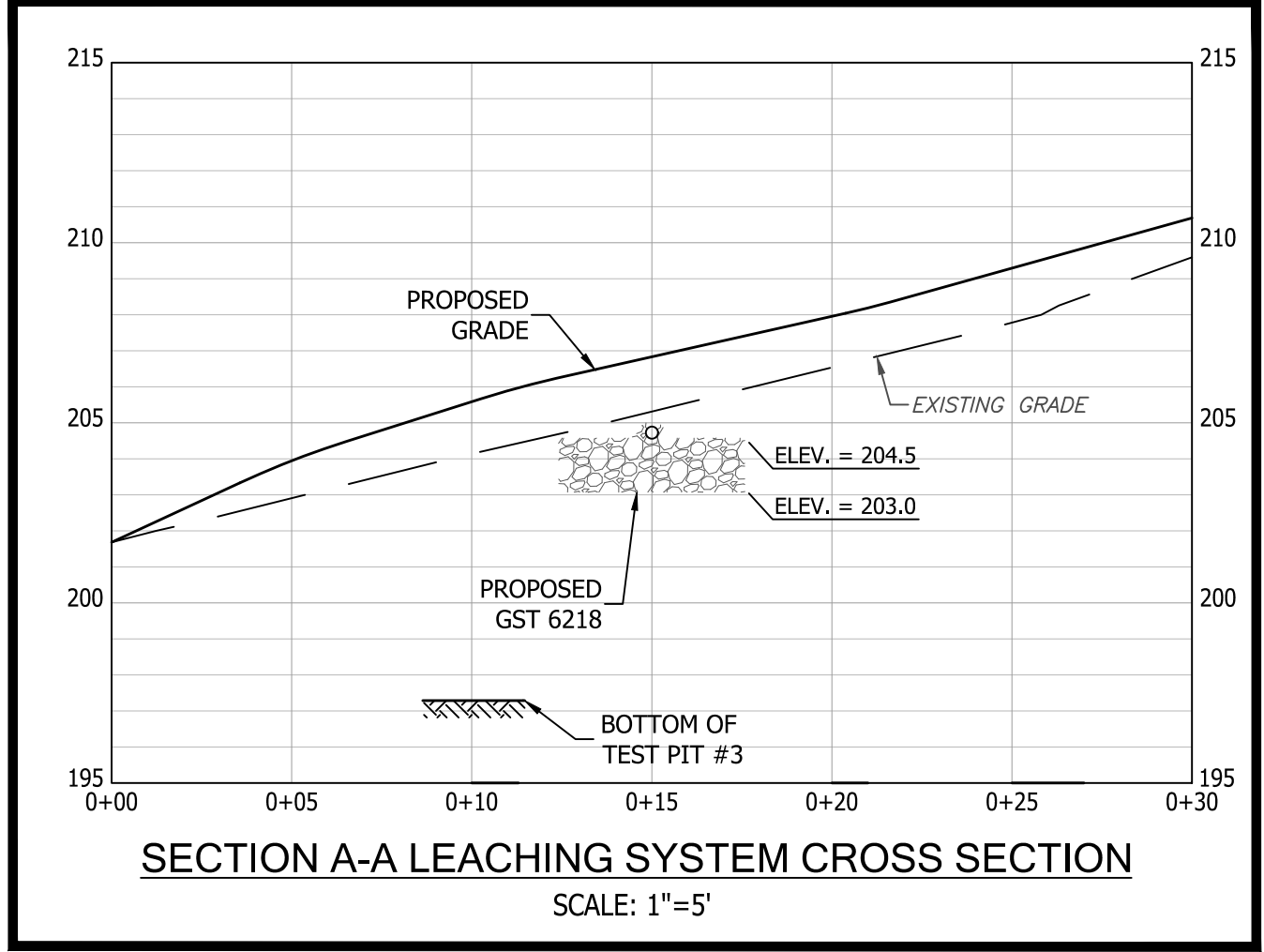
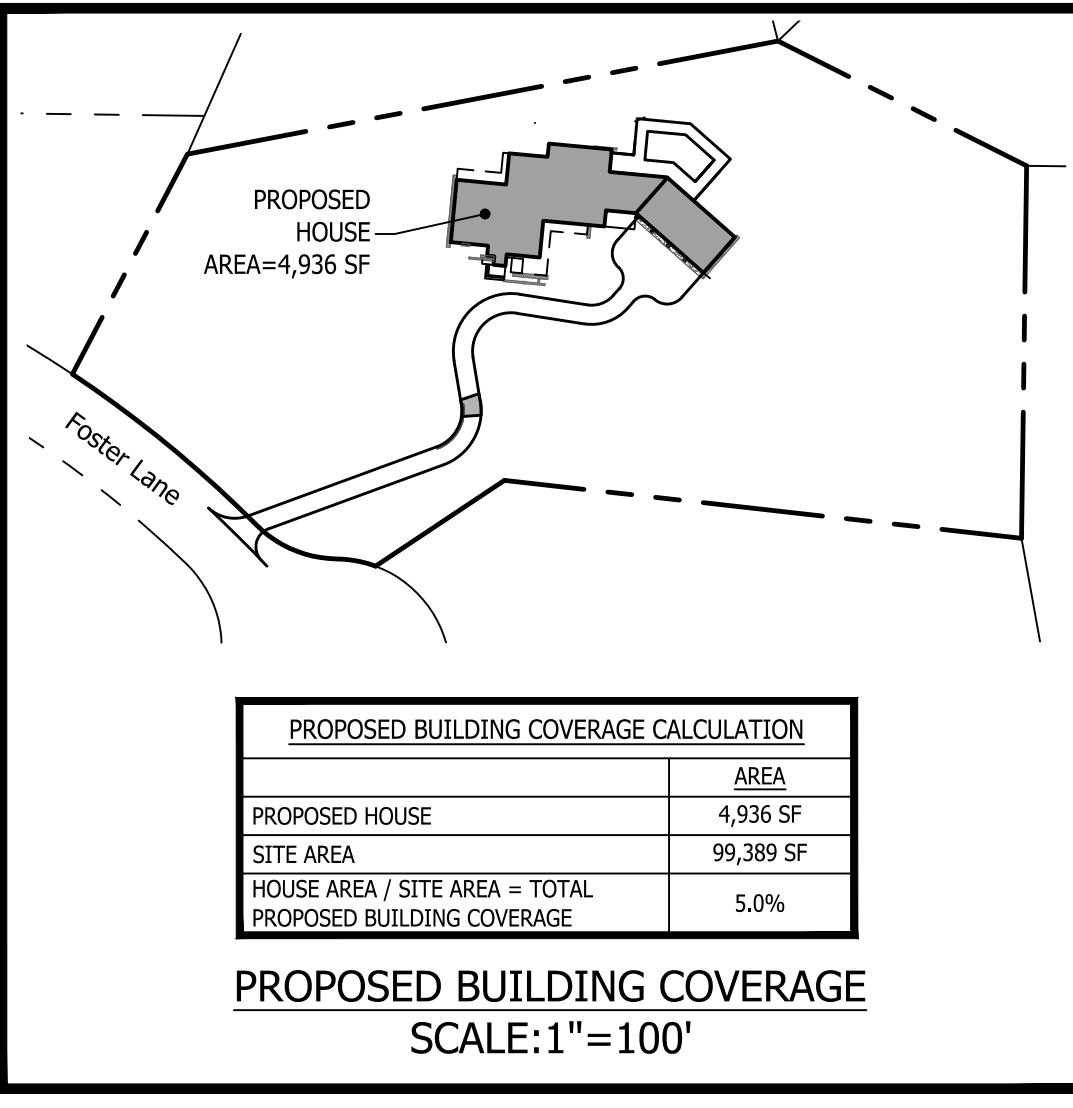
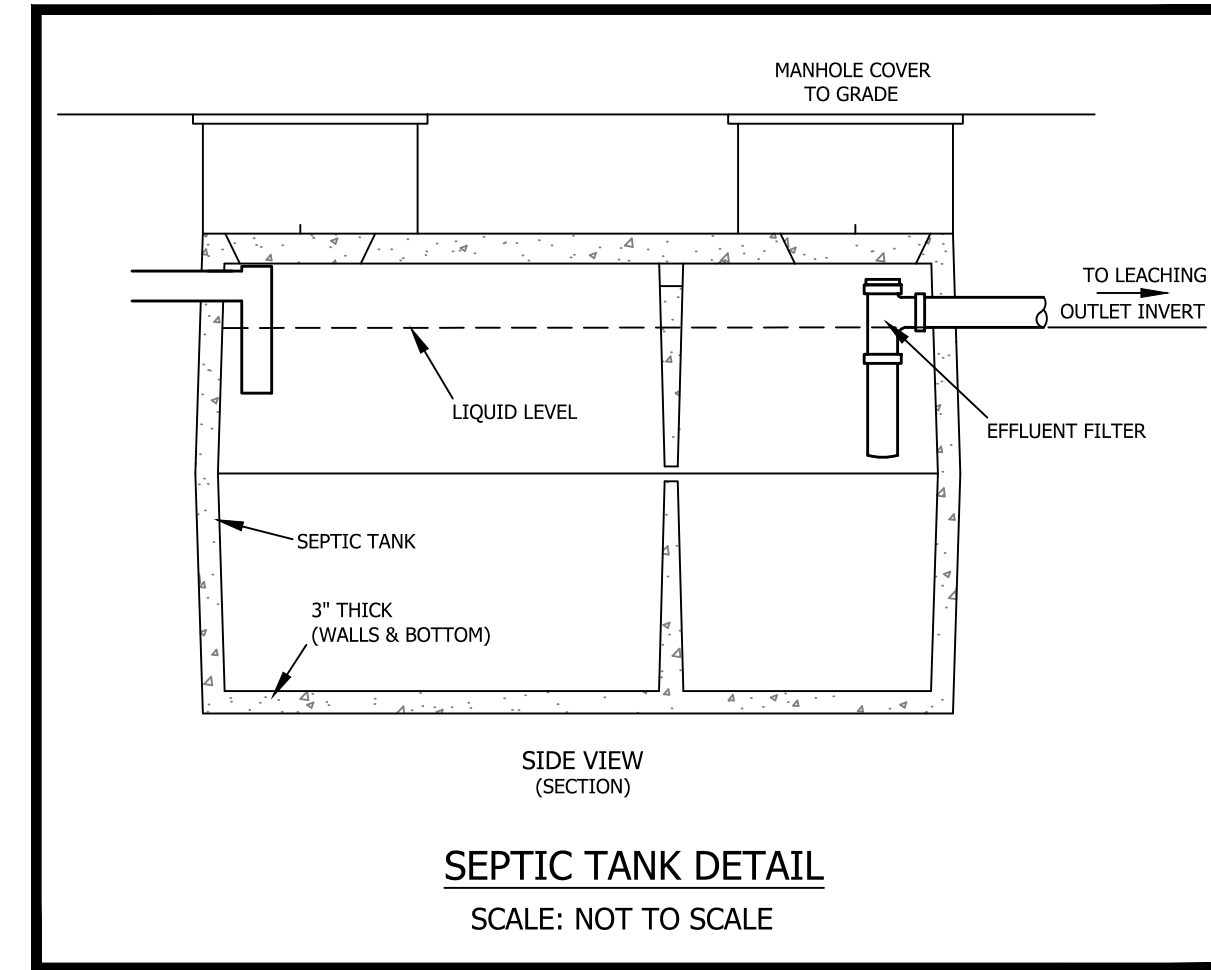
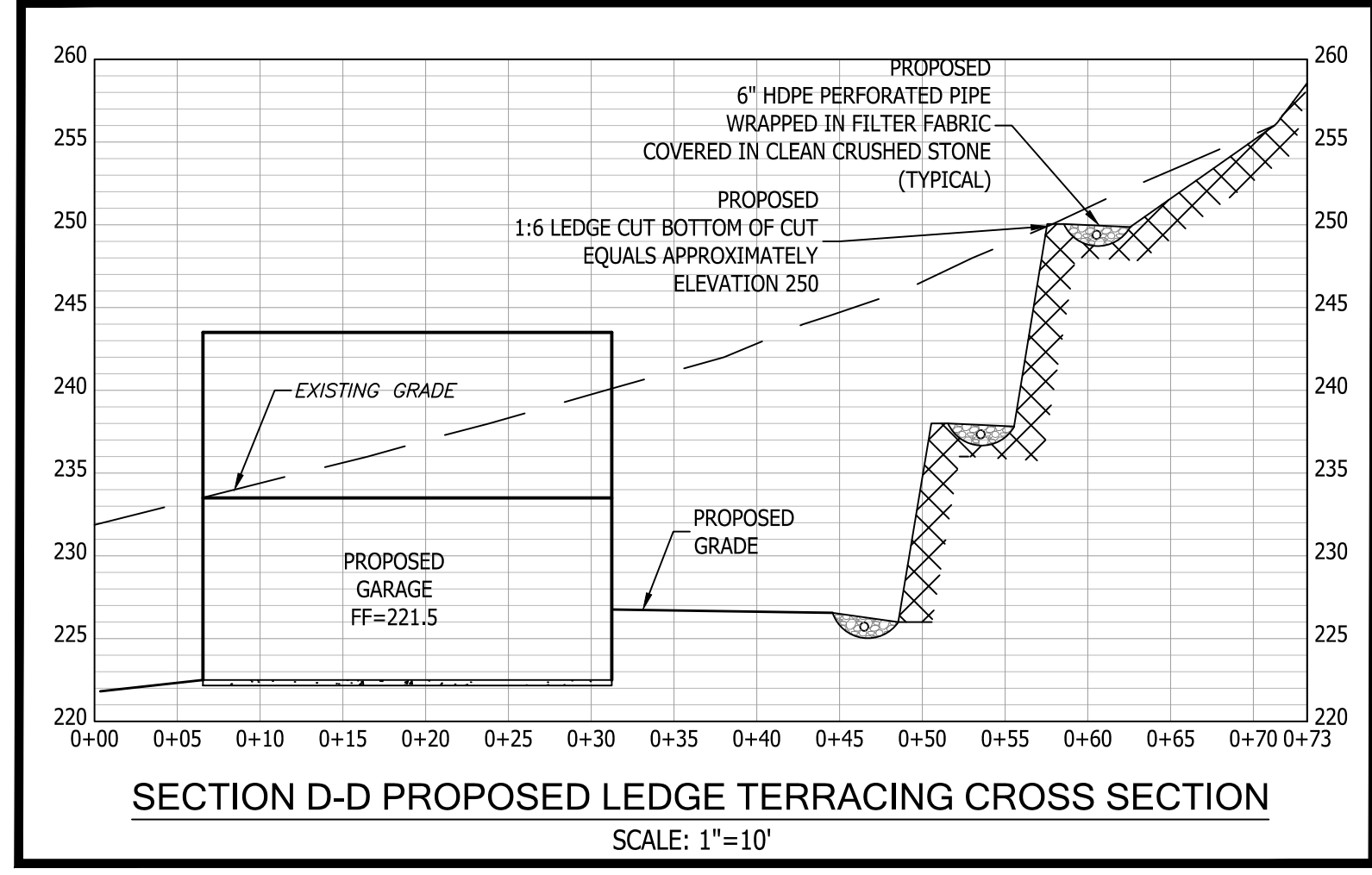


- NOTES - SEPTIC SYSTEM**
- PROPOSED CONSTRUCTION TO CONFORM TO THE LATEST REVISION OF THE STATE OF CONNECTICUT PUBLIC HEALTH CODE.
 - TOPOGRAPHIC INFORMATION TAKEN FROM CT ENVIRONMENTAL CONDITIONS ONLINE LIDAR DATA.
 - ENGINEER AND SANITARIAN WILL BE CONTACTED IF SOIL CONDITIONS OTHER THAN THOSE SHOWN ON PLAN ARE ENCOUNTERED AND WORK WILL BE HALTED PENDING REVIEW OF THOSE CONDITIONS.
 - ELEVATIONS SHOWN REFER TO THE INVERT (FLOW LINE) OF THE PROPOSED LEACHING SYSTEM UNLESS NOTED OTHERWISE.
 - SEPTIC TANK CONSTRUCTION JOINTS SHALL BE SEALED WITH ASPHALT CEMENT. ALL PIPE CONNECTIONS TO THE SEPTIC TANK AND DISTRIBUTION BOXES SHALL BE SEALED WITH A POLYETHYLENE GASKET ("POLYLOK" OR APPROVED EQUAL).
 - SEPTIC TANK Baffles SHALL CONFORM TO TECHNICAL STANDARDS OF THE PUBLIC HEALTH CODE.
 - SEPTIC TANKS SHALL HAVE AN APPROVED NON-BYPASS EFFLUENT FILTER AT THE OUTLET.
 - SEPTIC TANK SHALL BE TWO COMPARTMENT TANK WITH HEAVY DUTY STEEL HANDLES FOR MANHOLE ACCESS COVERS AND GAS Baffles INSTALLED AT OUTLET PIPING. TANKS TO BE WATER TIGHT.
 - ALL PIPES UPSTREAM OF THE SEPTIC TANK SHALL BE 4" DIAMETER SCH 40 ASTM D1785 OR D2665. ALL PIPES DOWNSTREAM OF THE SEPTIC TANK SHALL BE 4" DIAMETER SDR 35 ASTM D3034.
 - NO DEVIATIONS FROM THE APPROVED DESIGN PLAN SHALL BE ALLOWED WITHOUT THE PRIOR APPROVAL OF THE ENGINEER AND SANITARIAN.
 - EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO FIELD MODIFICATION AS REQUIRED BY THE DESIGN ENGINEER OR TOWN OFFICIALS TO INCREASE EROSION AND SEDIMENT CONTROL MEASURES.
 - ALL FILTER FABRIC SHALL BE 1.5 OZ./YD. (ASTM D-5261), PERMEABILITY OF 1.0 SEC. (ASTM D-4491) AND A TRAPEZOID TEAR OF 15 LBS. (ASTM D-4533) OR EQUAL.
 - ALL DISTURBED AREAS SHALL BE TOPSOILED AND TURF ESTABLISHED.
 - BUILDINGS HAVE NO GARBAGE GRINDERS, OR LARGE TUBS OVER 100 GALLONS.
 - NO FOOTING DRAINS SHALL BE INSTALLED WITHIN 25' OF PROPOSED SEPTIC SYSTEM.
 - LICENSED SURVEYOR TO STAKE SYSTEM. LICENSED SEPTIC INSTALLER TO DO SITE PREPARATION WORK. BENCH MARK TO BE SET IN FIELD.
 - NO WORK (OTHER THAN TREE CLEARING) SHALL COMMENCE IN THE SYSTEM AREA UNTIL A SEPTIC PERMIT HAS BEEN TAKEN OUT BY THE LICENSED INSTALLER.
 - STRIP INSPECTIONS SHALL BE DONE BY BOTH THE ENGINEER AND SANITARIAN.
 - SYSTEM AREA SHOULD BE RE-STRIPPED AND REFILLED PRIOR TO START OF CONSTRUCTION TO PREVENT HEAVY EQUIPMENT COMPACTION FROM DRIVEWAY.
 - A RISER IS REQUIRED FOR SEPTIC TANKS WITH 12" OR MORE OF COVER.

- SYSTEM SITE PREPARATION**
- A MINIMUM OF 24 HOURS, BUT PREFERABLY 48 HOURS NOTICE SHALL BE GIVEN BY THE INSTALLER TO THE ENGINEER AND SANITARIAN BEFORE ANY STRIPPING IS DONE FOR THE SYSTEM.
 - THE LICENSED INSTALLER SHALL BE ON SITE DURING SYSTEM CONSTRUCTION WORK WILL BE STOPPED BY THE HEALTH DEPARTMENT IF THIS REQUIREMENT IS NOT COMPLIED WITH.
 - NO SYSTEM IS TO BE BACKFILLED UNTIL THE SANITARIAN HAS GIVEN THE OK. THE OK WILL NOT BE GIVEN UNTIL THE ENGINEER HAS PROVIDED WRITTEN OR VERBAL COMMUNICATION THAT THE SYSTEM IS INSTALLED IN COMPLIANCE WITH THE HEALTH CODE AND THEIR DESIGN, OR WITH ACCEPTABLE MODIFICATIONS.
- EROSION CONTROL**
- PURPOSE**
ALL CONSTRUCTION ACTIVITIES INVOLVING THE REMOVAL OR DISTURBANCE OF SOILS ARE TO BE PROVIDED WITH APPROPRIATE PROTECTIVE MEASURES TO MINIMIZE EROSION AND CONTAIN SEDIMENT DISPOSITION WITHIN THE AREA UNDER DEVELOPMENT. THE MINIMUM STANDARD FOR INDIVIDUAL MEASURES SHALL BE THOSE OUTLINED IN THE CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL, 2002 EDITION AS AMENDED TO DATE. THOSE METHODS DEEMED MOST EFFECTIVE FOR THIS PROJECT ARE DESCRIBED HEREIN.
 - INSTALLATION REQUIREMENTS**
 - OTHER THAN CONSTRUCTION SPECIFICALLY SHOWN ON THESE APPROVED PLANS, NO ACTIVITIES SHALL BE CONDUCTED WITHIN DESIGNATED WETLAND AREAS, WATERCOURSES, FLOOD PLAINS OR WITHIN CHANNEL ENCROACHMENT LINES WITHOUT THE PRIOR APPROVAL OF THE TOWN PLANNING AND ZONING COMMISSION AND INLAND WETLANDS COMMISSION.
 - WHERE FEASIBLE, NATURAL VEGETATION SHALL BE RETAINED AND PROTECTED.
 - ONLY THE SMALLEST PRACTICAL AREA OF LAND SHALL BE EXPOSED AT ANY ONE TIME DURING CONSTRUCTION.
 - PRIOR TO THE START OF CONSTRUCTION, TEMPORARY BAILED HAY EROSION CHECKS, SEDIMENTATION FENCES AND OTHER APPROVED SEDIMENT CONTROL MEASURES SHALL BE IN PLACE WHERE SHOWN ON THESE PLANS AND AT OTHER LOCATIONS WHERE DEEMED NECESSARY.
 - WHEN LAND IS EXPOSED DURING DEVELOPMENT, THE PERIOD OF EXPOSURE SHALL BE KEPT TO A MINIMUM. INSTALLING PERMANENT AND FINAL VEGETATION, STRUCTURES, ETC. AT THE EARLIEST POSSIBLE OPPORTUNITY.
 - CONSTRUCTION EQUIPMENT SHALL NOT UNNECESSARILY CROSS LIVE STREAMS EXCEPT BY MEANS OF BRIDGES, CULVERTS OR OTHER APPROVED MEANS.
 - ALL TEMPORARY EROSION AND SEDIMENT CONTROLS SHALL REMAIN IN PLACE AND BE MAINTAINED REGULARLY IN PROPER FUNCTIONING CONDITION, UNTIL ALL AREAS EXPOSED DURING SITE CONSTRUCTION HAVE BEEN SUITABLY STABILIZED WITH PAVEMENT, PERMANENT STRUCTURES AND/OR FINAL VEGETATIVE COVER.
 - ADEQUATE PROVISIONS SHALL BE MADE TO PREVENT SURFACE WATER FROM DAMAGING THE CUT FACE OF EXCAVATIONS OR THE SLOPING SURFACES OF FILLS.
 - FILL SHALL BE PLACED AND COMPACTED SO AS TO MINIMIZE SLIDING OR EROSION OF THE SOIL.

- INSTALLATION NOTES**
- LAYOUT SYSTEM.
 - PREPARE SITE AND REMOVE ANY TREES WITH A DRIP LINE FALLING WITHIN 10 FEET OF THE LEACHING SYSTEM.
 - EXCAVATE TRENCH TO A DEPTH THAT IS AT LEAST 2" BELOW THE BASE ELEVATION OF THE GST TO ACCOMMODATE A MINIMUM OF 2" OF SAND. TRENCH WIDTH SHOULD BE A MINIMUM OF 45" FOR THE GST 37 SERIES AND 70" FOR GST 62 SERIES.
 - RAKE/SCARIFY SIDEWALLS AND BOTTOM OF TRENCH TO ADDRESS ANY SMEARING OF FINES, AND THEN DO NOT WALK IN TRENCH BOTTOM.
 - PLACE A MINIMUM OF 2" OF ASTM C-33 SAND OR APPROVED EQUIVALENT (SAND) IN THE BOTTOM OF THE EXCAVATION TO SERVE AS BASE FOR GST, RAKE AND LEVEL AND UNIFORMLY COMPACT. IF A 2" LIFT OF SAND IS PRESENT SIMPLY WALKING ON IT SHOULD PROVIDE SUFFICIENT COMPACTION.
 - SET THE GST FORMS IN CENTER OF TRENCH.
 - PLACE COVERS OVER ENTIRE CENTER STONE CHANNEL AND ALTERNATING STONE FINGER COMPARTMENTS.
 - PLACE SAND INTO VOID SPACE BETWEEN TRENCH SIDEWALL AND GST FORM. ALSO FILL THE SAND FINGER VOIDS IN THE FORMS AND UNIFORMLY COMPACT.
 - REMOVE ALL COVERS FROM OVER ENTIRE CENTER STONE CHANNEL AND STONE FINGER COMPARTMENTS.
 - PLACE CLEAN CT DOT #6 (3/4") STONE INTO THE INTERIOR OF THE GST FORM.
 - PULL FIRST GST FORM AND "LEAP FROG" FORM AHEAD OF THE LAST GST FORM.
 - REPEAT SEQUENCE UNTIL DESIRED TRENCH LENGTH IS INSTALLED.
 - ENSURE THAT SAND AND BACKFILL MATERIALS ARE COMPACTED TO PREVENT SETTLEMENT.
 - INSTALL APPROVED DISTRIBUTION PIPING ON TOP OF THE 12" CENTRAL STONE CHANNEL.
 - PLACE STONE AROUND THE DISTRIBUTION PIPE.
 - PUT APPROVED FILTER FABRIC OVER THE SYSTEM.
 - BACKFILL SYSTEM TO ENSURE THAT UNIFORM COVER AND COMPACTION EXISTS OVER THE TOP OF THE SYSTEM (A MINIMUM OF 6" OF COVER IS REQUIRED). WHEN GST IS INSTALLED BELOW AREAS SUBJECT TO #20 LOADING, SEE NOTE BELOW.
 - FINISH GRADE OVER THE SYSTEM SHOULD ENSURE THAT STORM WATER SHEET FLOW IS DIVERTED AWAY FROM THE LEACHING SYSTEM, TANK(S) AND PUMP TANK(S) IF PRESENT.
 - SEED AND HAY DISTURBED AREA. THE USE OF WOOD CHIPS AS COVER MATERIAL IS NOT RECOMMENDED.
 - MAINTAIN THE AREA TO PREVENT TREE ROOTS FROM IMPACTING THE SYSTEM.
 - PROPERLY SERVICE THE SEPTIC TANK EVERY 3-5 YEARS; OR AS ADVISED BY THE REGULATORY AGENCY OR YOUR SERVICE PROVIDER.

- SOIL EROSION AND SEDIMENT CONTROL PLAN NARRATIVE**
- THE SITE CONTRACTOR MUST FOLLOW ALL GUIDELINES SET FORTH IN THE MANUAL ENTITLED "2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL" PUBLISHED BY THE CONNECTICUT COUNCIL ON SOIL AND WATER CONSERVATION IN COOPERATION WITH THE CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION. THIS MANUAL IS ALSO KNOWN AS DEP BULLETIN 34. IN ADDITION THE SITE CONTRACTOR MUST FOLLOW THE TOWN'S ZONING AND SUBDIVISION REGULATIONS, TOWN EMERGENCY STANDARDS AND SPECIFICATIONS, CT DOT FORM 816 WHERE APPLICABLE.
- LAND DISTURBANCE**
- ALL EXISTING VEGETATION OUTSIDE OF THE CLEARING LIMITS SHALL BE PROTECTED. EXISTING VEGETATION SHALL BE REMOVED ONLY IN AREAS NECESSARY FOR SITE CONSTRUCTION ACTIVITIES. ANY ADDITIONAL CLEARING OUTSIDE OF THE PROPOSED CLEARING LIMITS SHALL BE APPROVED BY TOWN STAFF PRIOR TO CLEARING, AS APPLICABLE.
 - ALL AREAS SHALL REMAIN UNDISTURBED UNTIL IMMEDIATELY PRIOR TO SITE DEVELOPMENT.
 - ALL CONSTRUCTION EQUIPMENT, MATERIALS AND STOCKPILES SHALL NOT BE PLACED OUTSIDE OF THE DISTURBED AREAS.
 - THE DEVELOPER SHALL BE RESPONSIBLE FOR THE CLEANING OF ANY NEARBY STREETS, AS ORDERED BY THE TOWN OR STATE, OF ANY SOIL OR DEBRIS FROM THE SITE CONSTRUCTION ACTIVITIES.
 - ALL TREES, BRUSH, STUMPS, WOOD CHIPS OR OTHER ORGANIC MATTER SHALL BE DISPOSED OF PROPERLY OFF-SITE. WOOD CHIPS MAY BE USED AS A SILTATION BARRIER DURING CONSTRUCTION AND SPREAD AFTER SITE IS STABILIZED. NO ORGANIC MATTER INCLUDING TREES, BRUSH AND STUMPS SHALL BE BURIED ON-SITE.
- STRIPPING AND STOCKPILING**
- ALL STOCKPILES THAT CONSIST OF ERODIBLE MATERIALS SHALL BE LOCATED WITHIN AREAS AS SHOWN ON THE SITE PLAN AND SURROUNDED BY A SILTATION BARRIER. ANY STOCKPILE THAT WILL REMAIN UNDISTURBED FOR A PERIOD LONGER THAN 30 DAYS SHALL BE SEED WITH A TEMPORARY GRASS SEED MIXTURE TO PREVENT EXCESSIVE EROSION AND SEDIMENTATION.
- TRENCH EXCAVATION AND BACKFILL**
- THE CONTRACTOR SHALL PROPERLY MAINTAIN ALL BACKFILLED EXCAVATIONS. ANY DEPRESSIONS DUE TO SETTLING IN THESE AREAS SHALL BE FILLED AND RESEDED AS NECESSARY.
- THE WIDTH OF ALL EXCAVATED TRENCHES SHALL BE KEPT AS NARROW AS PRACTICABLE TO ACCOMMODATE THE WORK. ALL MATERIALS EXCAVATED FROM TRENCHES SHALL BE STOCKPILED AND USED AS TRENCH BACKFILL MATERIAL UNLESS IT IS DETERMINED TO BE UNSUITABLE BY THE ENGINEER. EXCESS MATERIALS SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR.
- SOIL EROSION AND SEDIMENT CONTROLS**
- ALL ADJACENT PROPERTIES AND RECEIVING WATERCOURSES AND / OR WETLAND AREAS SHALL BE ADEQUATELY PROTECTED FROM SOIL EROSION AND SEDIMENTATION BOTH DURING AND AFTER CONSTRUCTION.
- ALL CONSTRUCTION SITE RUNOFF SHALL BE ROUTED INTERNALLY TO STORMWATER MANAGEMENT AREA. SEDIMENT SHALL BE MONITORED, MAINTAINED AND REMOVED AFTER EACH STORM EVENT IN EXCESS OF 1" OF RAINFALL OR WHEN THE CAPACITY EXCEEDS 50% OF THE STORAGE VOLUME. EROSION AND SEDIMENT CONTROLS SHALL BE INSPECTED WEEKLY AND AFTER ALL RAINFALL EVENTS. E & S CONTROLS SHALL BE REPAIRED OR REPLACED AS NECESSARY WITHIN 24 HOURS THROUGHOUT THE CONSTRUCTION DURATION.
- ADDITIONAL EROSION AND SEDIMENT CONTROLS MAY BE REQUIRED BY THE TOWN AND SHALL BE INSTALLED AND MAINTAINED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROLS BEFORE, DURING AND AFTER CONSTRUCTION. THE CONTRACTOR IS ALSO RESPONSIBLE FOR THE PROPER REMOVAL AND DISPOSAL OF ALL EROSION AND SEDIMENT CONTROLS ONCE THE SITE IS COMPLETELY STABILIZED.
- ALL EROSION AND SEDIMENT CONTROLS SHALL BE INSPECTED WEEKLY AND AFTER ALL RAINFALL EVENTS. E & S CONTROLS SHALL BE REPAIRED OR REPLACED AS NECESSARY WITHIN 24 HOURS THROUGHOUT THE CONSTRUCTION DURATION.
- ALL ACCUMULATED SEDIMENTS AT ALL EROSION AND SEDIMENT CONTROLS SHALL BE PERIODICALLY REMOVED AND SPREAD IN AREAS THAT ARE NOT SUBJECT TO EROSION.
- THE PERMITTEE SHALL EMPLOY BEST MANAGEMENT PRACTICES, CONSISTENT WITH THE TERMS AND CONDITIONS OF THE INLAND WETLANDS PERMIT, TO CONTROL STORMWATER DISCHARGES AND TO PREVENT EROSION AND SEDIMENTATION AND TO OTHERWISE PREVENT POLLUTION OF WETLANDS OR WATERCOURSES. THE PERMITTEE SHALL IMMEDIATELY INFORM THE TOWN WETLANDS OFFICER OF ANY PROBLEMS INVOLVING WETLANDS OR WATERCOURSES THAT HAVE DEVELOPED IN THE COURSE OF, OR THAT ARE CAUSED BY, THE AUTHORIZED WORK.
- THE RESPONSIBLE CONTACT PERSON FOR THE INSTALLATION AND MAINTENANCE OR EROSION AND SEDIMENTATION CONTROLS ON THIS PROJECT WILL BE THE SITE CONTRACTOR. THE CONTACT INFORMATION FOR THE CONTRACTOR WILL BE MADE AVAILABLE TO THE TOWN AS SOON AS IT IS AVAILABLE.
- VEGETATIVE TURF ESTABLISHMENT PROCEDURE**
- SCARIFY ALL AREAS TO BE TOPSOILED AND SEED. APPLY A MINIMUM OF 4 INCHES OF TOPSOIL ON ALL AREAS TO BE SEED. APPLY GRASS SEED, LIME, FERTILIZER AND MULCH ACCORDING TO THE FOLLOWING SCHEDULE:
- PERMANENT SEED MIXTURE:
 CREEPING RED FESCUE 2.4 LBS. PER 1,000 SQ. FT.
 REDTOP 0.2
 TALL FESCUE 2.4
 TOTAL 5.0
- FERTILIZER:
 10-10-10 APPLY AT 7.5 LBS. PER 1,000 SQ. FT.
- LIMESTONE:
 APPLY AT 150 LBS. PER 1,000 SQ. FT.
- MULCHING:
 SPREAD HAY OR STRAW OVER ALL AREAS AFTER SEEDING. USE 1 1/2 TO 2 BALES PER 1,000 SQ. FT. TARGET FOR 100% COVERAGE. ANCHOR BY USING NETTING OR TRACKING AS NECESSARY.
- SEEDING DATES:
 SEEDING DATES IN CONNECTICUT ARE NORMALLY APRIL 1 THROUGH JUNE 15 AND AUGUST 15 THROUGH OCTOBER 1. SEED GERMINATION NORMALLY CANNOT BE EXPECTED FROM NOVEMBER THROUGH FEBRUARY. IF ADEQUATE SEED GERMINATION IS NOT POSSIBLE DUE TO TIME OF YEAR CONSTRAINTS, MULCHING SHALL BE ADEQUATELY PROVIDED TO PROTECT THE SEED FROM WIND AND SURFACE EROSION UNTIL THE WEATHER IMPROVES AND THE SEEDING BECOMES WELL ESTABLISHED.



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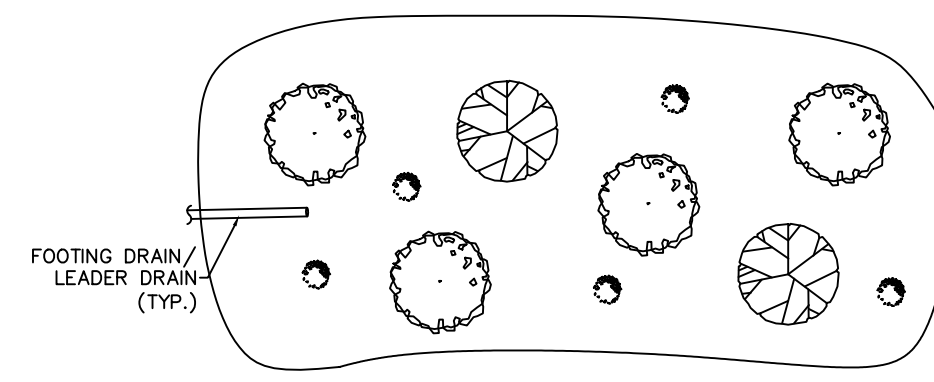
Detail Sheet
of
3 Foster Lane
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Prepared For:
Bevon Semple
August 5, 2021

DRAWING SCALE: AS SHOWN 0 0.5" 1.0" 2.0"

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SHEET NO. 5 OF 6 JOB NO. 21-001010 DRAWN BY: CAC

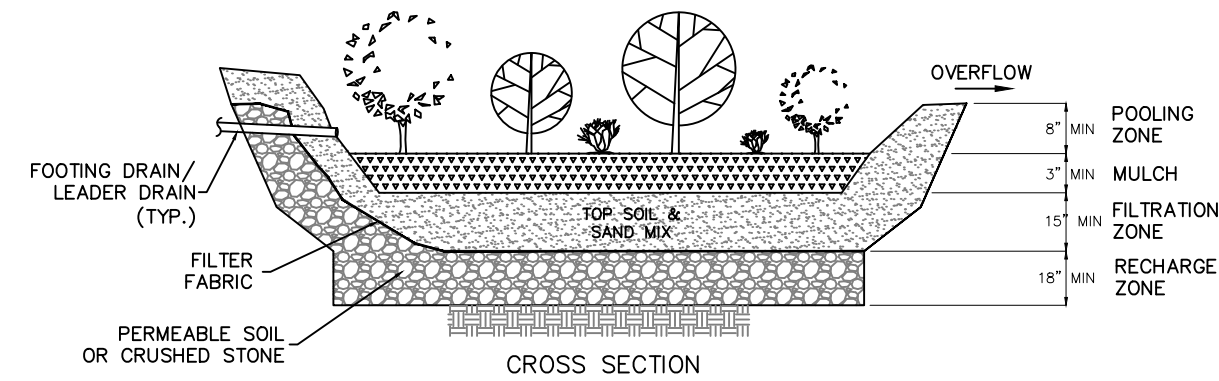


PLAN VIEW

NOTE:
BEFORE PLANTING ADD LAYER OF POTTING SOIL AND FERTILIZER

RAIN GARDEN DETAIL

NOT TO SCALE



CROSS SECTION

RAIN GARDEN #3 CALCULATION

THE FIRST INCH OF RAINFALL FROM SOUTH LEDGE TERRACING DRAINS
 $1/12' \times 580 \text{ SF} = 48.33 \text{ CF}$

THE FIRST INCH OF RAINFALL FROM YARD
 $1/12' \times 1524 \text{ SF} \times 80\% = 101.60 \text{ CF}$

THE PROPOSED RAIN GARDEN STORAGE CAPABILITY IS
 $8/12' \times 115 + 1.5' \times 30\% \times 115 + 1.5' \times 30\% \times 115 = 197.80 \text{ CF}$

DRAINAGE STORED
 $197.80 \text{ CF} \div (580 + 1524) \text{ SF} \times 12" = 1.07"$
 FIRST 1.07" STORED

RAIN GARDEN #2 CALCULATION

THE FIRST INCH OF RAINFALL FROM EAST HOUSE DRAINS
 $1/12' \times 3584 \text{ SF} = 298.67 \text{ CF}$

THE FIRST INCH OF RAINFALL FROM YARD
 $1/12' \times 1787 \text{ SF} \times 80\% = \text{CF}$

THE PROPOSED RAIN GARDEN STORAGE CAPABILITY IS
 $8/12' \times 310 + 1.5' \times 30\% \times 310 + 1.5' \times 30\% \times 310 = 486.70 \text{ CF}$

DRAINAGE STORED
 $486.70 \text{ CF} \div (3584 + 1787) \text{ SF} \times 12" = 1.03"$
 FIRST 1.03" STORED

RAIN GARDEN #4 CALCULATION

THE FIRST INCH OF RAINFALL FROM WEST HOUSE DRAINS
 $1/12' \times 1339 \text{ SF} = 111.58 \text{ CF}$

THE FIRST INCH OF RAINFALL FROM YARD
 $1/12' \times 2560 \text{ SF} \times 80\% = 170.66 \text{ CF}$

THE PROPOSED RAIN GARDEN STORAGE CAPABILITY IS
 $8/12' \times 220 + 1.5' \times 30\% \times 220 + 1.5' \times 30\% \times 220 = 170.66 \text{ CF}$

DRAINAGE STORED
 $170.66 \text{ CF} \div (1339 + 2560) \text{ SF} \times 12" = 1.01"$
 FIRST 1.01" STORED

RAIN GARDEN #5 CALCULATION

THE FIRST INCH OF RAINFALL FROM YARD
 $1/12' \times 5170 \text{ SF} \times 80\% = 344.65 \text{ CF}$

THE PROPOSED RAIN GARDEN STORAGE CAPABILITY IS
 $8/12' \times 171 + 1.5' \times 30\% \times 171 + 1.5' \times 30\% \times 171 = 268.97 \text{ CF}$

DRAINAGE STORED
 $268.97 \text{ CF} \div (5170) \text{ SF} \times 12" = 0.60"$
 FIRST 0.60" STORED

RAIN GARDEN #1 CALCULATION

THE FIRST INCH OF RAINFALL FROM NORTH LEDGE TERRACING DRAINS
 $1/12' \times 797 \text{ SF} = 66.42 \text{ CF}$

THE FIRST INCH OF RAINFALL FROM YARD AND RUNOFF RAIN GARDEN #5
 $(1/12' \times 5170 \times 40\%) + (1/12' \times 5967 \text{ SF} \times 80\%) = 570.11 \text{ CF}$

THE PROPOSED RAIN GARDEN STORAGE CAPABILITY IS
 $8/12' \times 385 + 1.5' \times 30\% \times 385 + 1.5' \times 30\% \times 385 = 604.45 \text{ CF}$

DRAINAGE STORED
 $604.45 \text{ CF} \div (797 + 6842) \text{ SF} \times 12" = 0.62"$
 FIRST 0.62" STORED

RAIN GARDEN #6 CALCULATION

THE FIRST INCH OF RAINFALL FROM RUNOFF FROM RAIN GARDEN #1
 $1/12' \times (6842 \times 38\%) \text{ SF} = 216.64 \text{ CF}$

THE PROPOSED RAIN GARDEN STORAGE CAPABILITY IS
 $8/12' \times 299 + 1.5' \times 30\% \times 299 + 1.5' \times 30\% \times 299 = 469.83 \text{ CF}$

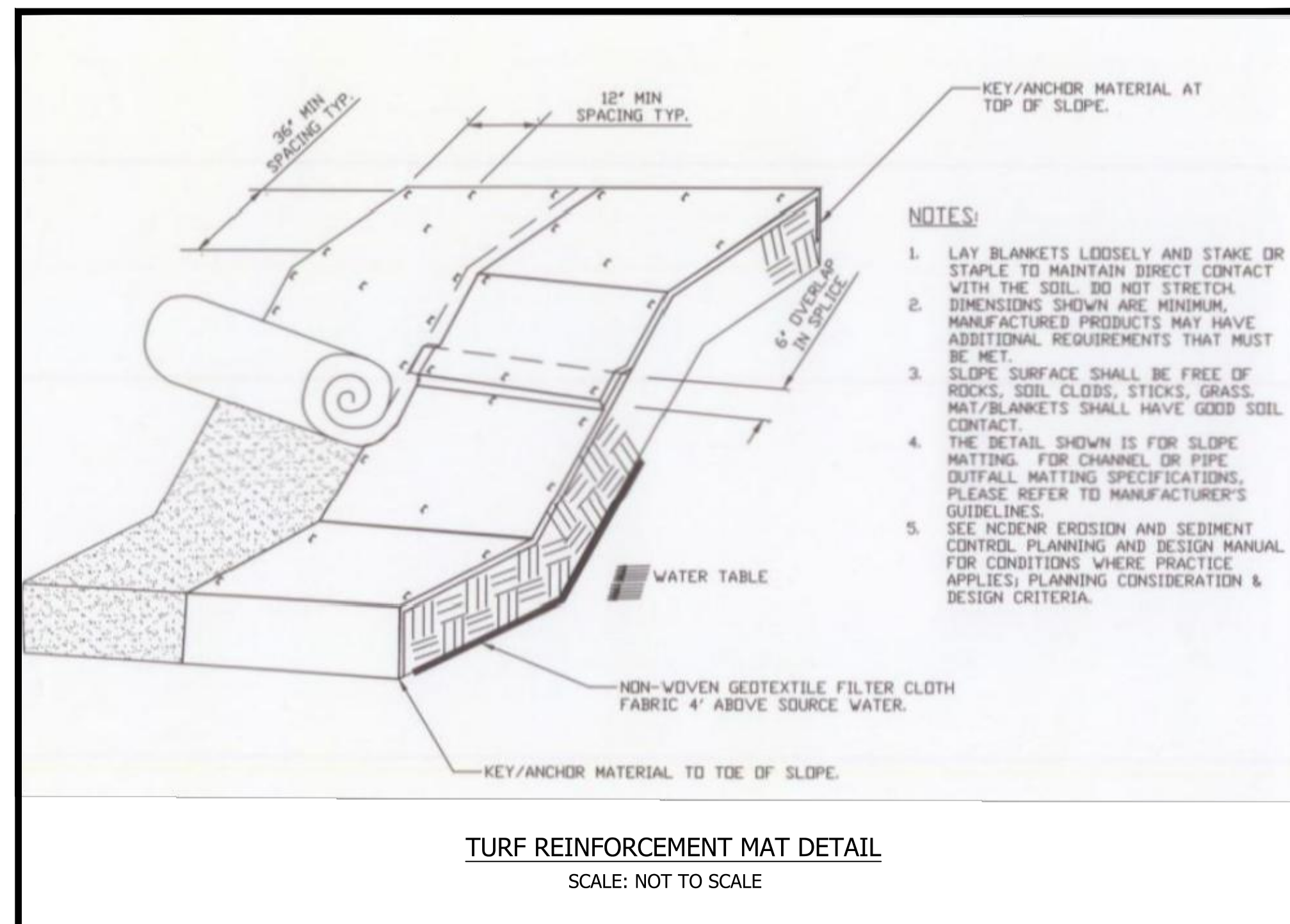
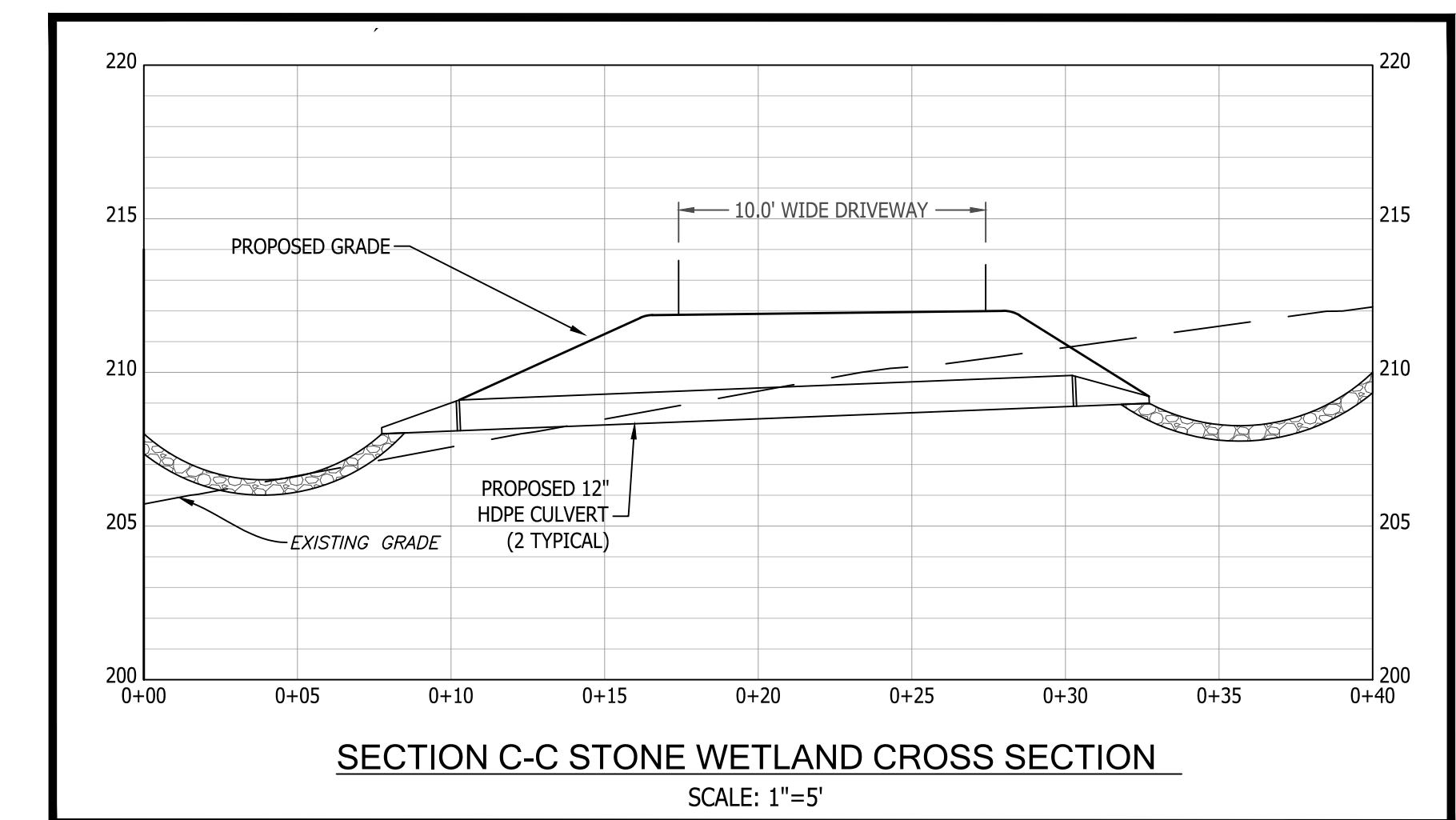
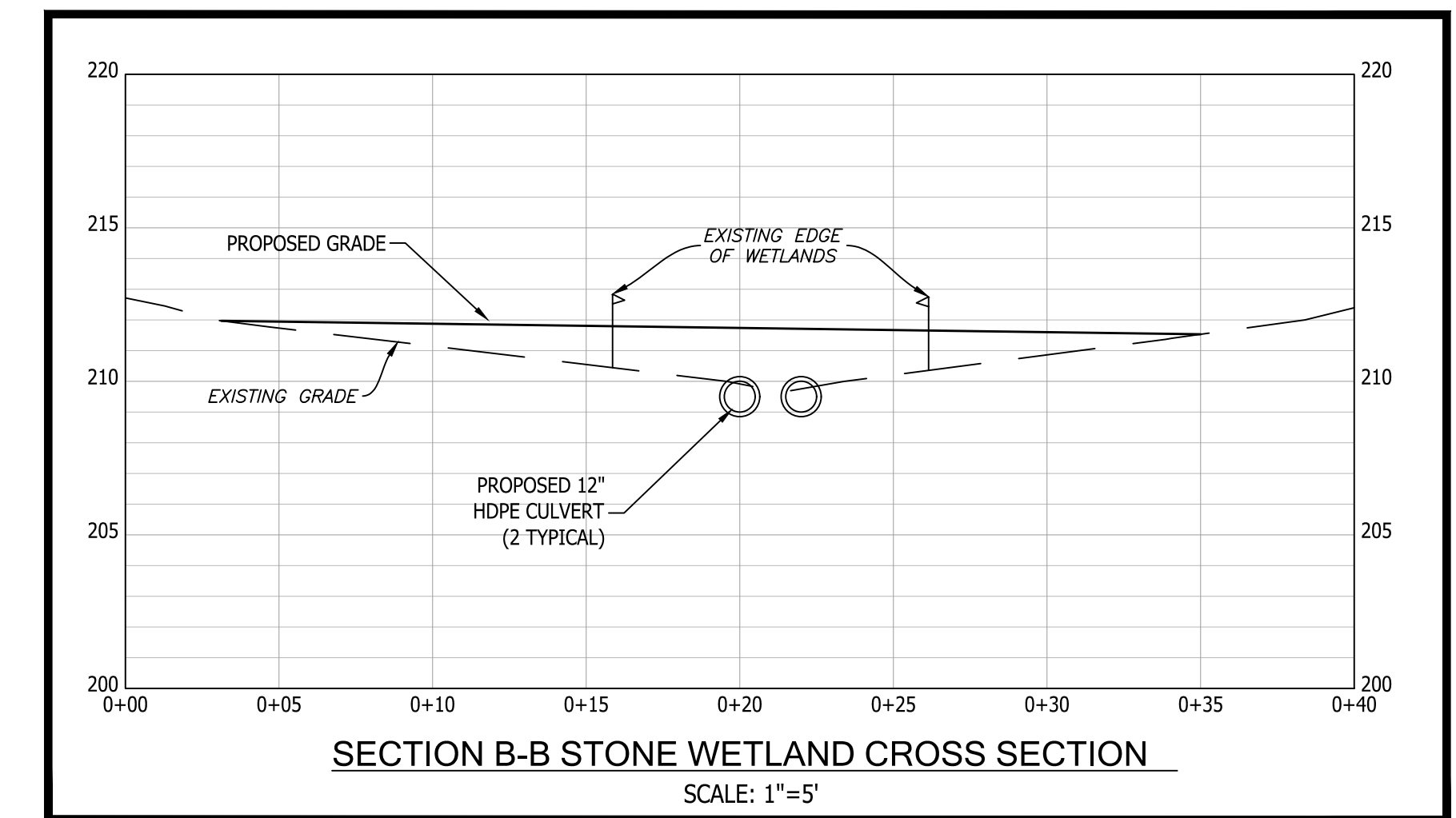
DRAINAGE STORED
 $469.83 \text{ CF} \div (4499.6) \text{ SF} \times 12" = 2.17"$
 FIRST 2.17" STORED

The following plants are acceptable in the proposed rain garden:

- Trees**
 Red Maple, Acer rubrum
 Shadblow, Amelanchier arborea
 River Birch, Betula nigra
 Gray Birch, Betula populifolia
 Red-Panicked Dogwood, Cornus racemosa
 White Ash, Fraxinus americana
 Green Ash, Fraxinus pennsylvanica
 Witchhazel, Hamamelis virginiana
 Red Cedar, Juniperus virginiana
 American Sweetgum, Liquidambar styraciflua
 Tupelo, Nyssa sylvatica
 American Hop Hornbeam, Ostrya virginiana
 Swamp White Oak, Quercus bicolor
 Pin Oak, Quercus palustris
 Red Oak, Quercus rubra

- Shrubs and Vines**
 Red Chokeberry, Aronia arbutifolia
 Black Chokeberry, Aronia melanocarpa
 Wild Clematis, Clematis virginiana
 Sweet Pepperbush, Clethra alnifolia
 Red Twig Dogwood, Cornus sericea
 Black Huckleberry, Gaylussacia baccata
 Inkberry, Ilex glabra
 American Holly, Ilex opaca
 Winterberry Holly, Ilex verticillata
 Mountain-laurel, Kalmia latifolia
 Northern Spicebush, Lindera benzoin
 Trumpet Honeysuckle, Lonicera sempervirens
 Northern Bayberry, Myrica pensylvanica
 Virginia Creeper, Parthenocissus quinquefolia
 Rosebud Azalea, Rhododendron periclymenoides
 *Great Rhododendron, Rhododendron maximum
 Shining Sumac, Rhus copallinum
 *Small Pussy-Willow, Salix humilis
 Elderberry, Sambucus canadensis
 American Arborvitae, Thuja occidentalis
 Late Lowbush Blueberry, Vaccinium angustifolium
 Highbush Blueberry, Vaccinium corymbosum
 Witherod, Viburnum cassinoides
 *Northern Arrowwood, Viburnum dentatum
 Nannyberry, Viburnum lentago

- Perennials and Herbaceous Plants**
 Northern Maidenhair Fern, Adiantum pedatum
 *Jack-in-the-pulpit, Arisaema triphyllum
 *Wild Columbine, Aquilegia canadensis
 *Bushy Aster, Aster dumosus
 *Heath Aster, Aster ericoides
 New England Aster, Aster novae-angliae
 Dwarf Cornel, Cornus canadensis
 Glade-fern, Deparia acrostichoides
 Tufted Hair Grass, Deschampsia cespitosa
 Carolina Lovegrass, Eragrostis pectinacea
 *Sweet Joe-Pye Weed, Eupatorium purpureum
 *Grass-leaved Goldenrod, Euthamia graminifolia
 and Euthamia tenuifolia
 Wintergreen, Gaultheria procumbens
 Interrupted Fern, Osmunda claytoniana
 Switchgrass, Panicum virgatum
 *Torrey's Mountain Mint, Pycnanthemum verticillatum
 *Virginia Mountain Mint, Pycnanthemum virginianum
 *Rough Goldenrod, Solidago rugosa
 New York Fern, Thelypteris noveboracensis



TURF REINFORCEMENT MAT DETAIL

SCALE: NOT TO SCALE

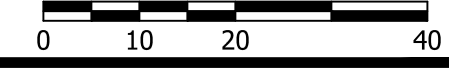
NOTES:

- LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH. DIMENSIONS SHOWN ARE MINIMUM.
- MANUFACTURED PRODUCTS MAY HAVE ADDITIONAL REQUIREMENTS THAT MUST BE MET.
- SLOPE SURFACE SHALL BE FREE OF ROCKS, SOIL CLODS, STICKS, GRASS. MAT/BANKETS SHALL HAVE GOOD SOIL CONTACT.
- THE DETAIL SHOWN IS FOR SLOPE MATTING. FOR CHANNEL OR PIPE OUTFALL MATTING SPECIFICATIONS, PLEASE REFER TO MANUFACTURER'S GUIDELINES.
- SEE NCDENR EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL FOR CONDITIONS WHERE PRACTICE APPLIES. PLANNING CONSIDERATION & DESIGN CRITERIA.

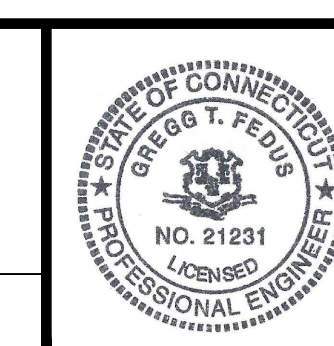
NO.	DATE	REVISIONS
1	10/27/2021	WETLAND COMMENTS
2	11/30/2021	WETLAND COMMENTS
3	1/4/2022	WETLAND COMMENTS

Detail Sheet
 of
 3 Foster Lane
 Ivoryton, Connecticut
 Prepared For:
 Bevon Sample
 August 5, 2021

DRAWING SCALE: 1"=20'



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